THE MEDICAL COLLEGE OF GEORGIA
The Health Sciences University of the State of Georgia

Today

Bright Ideas

Introduction

The Medical College of Georgia has a proud tradition of research excellence. MCG researchers through the years have been responsible for such historic breakthroughs as a cure for pellegra, the discovery of the beta-blocker theory and the groundwork for birth control pills and fertility drugs.

The scope of MCG research, past and present, is incredibly vast; the number of lives affected by the research is incalculable.

And MCG is more committed to research excellence than ever. Dr. Francis J. Tedesco, president of MCG, has established research as a top priority. To reflect that commitment, all four 1990 editions of *Medical College of Georgia Today* will be devoted to MCG's research mission.

This kickoff issue provides an overview of that mission. Included are articles about MCG's research relationship with businesses and corporations; research projects shared by MCG and sister institutions; and the resources that make MCG research possible.

And read about specific examples of MCG's research: the development of new drugs to combat AIDS and cancer; a new understanding of a deadly heart disorder; a breakthrough for those with sensitive teeth.

Also featured is a question/answer interview with Dr. Tedesco about his research goals.

The next three editions of the magazine will be devoted to specific areas of research. What goes on behind laboratory doors? How are lives changed when those doors open and discoveries are shared with the world? This series of magazines will offer some insight. ■

THE MEDICAL COLLEGE OF GEORGIA
The Health Sciences University of the State of Georgia

Today

Volume 18, Number 3 Winter 1990

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The Medical College of Georgia is the health sciences university of the University System of Georgia. Focusing on health care education, research and patient care, the Augusta-based institution consists of MCG Hospital, more than 80 support clinics, statewide outreach programs and the Schools of Allied Health Sciences, Dentistry, Graduate Studies, Medicine and Nursing.

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Building on a Solid Foundation

If a rock was tossed into a pile every time a discovery unfolded at the Medical College of Georgia through out its 162-year history, the pile would today be mountainous.

And, oh, what those rocks represent: the eradication of pellegra, the discovery of beta blockers, the groundwork for fertility drugs—a mountain of contributions to mankind.

The mountain is growing at an unprecedented rate. MCG has never been more committed to research than it is today.

"We intend to gain and maintain a regional and national reputation in research," said Dr. Francis J. Tedesco during his May inauguration as MCG's sixth president. "It is within the larger context of Georgia's continued economic development and in full cooperation with our sister institutions that we intend to fulfill this mission."

Dr. Lowell M. Greenbaum, dean of the MCG School of Graduate Studies and vice president of research, is excited about the directive. "Dr. Tedesco's commitment to research is a catalyst for my office to help find new funding, help provide new directions of research and help recruit a much more sizeable research group in this institution," he said.

The administration wants not only to add to MCG's 150 graduate faculty but to foster the research potential of all MCG faculty. "We need vitalization of our clinical research effort," Dr. Greenbaum said. "Clinical research is lacking. The problem has been the tremendous service need of these faculty."

And a redistribution of their responsibilities to create more time for research will enhance their other roles also, he predicts. "There's no question that an active reseacher makes a better teacher and clinician," he said. "In the 36 years that I've been in academia, I've always found that a research emphasis provides the best atmosphere for excitement in teaching. You attract the best faculty and you attract the best students."

Dr. Tedesco has called on department chairmen to help their faculty schedule time for research. And although he doesn't expect this research commitment from every faculty member, he wants involvement from all five schools.

"We're attempting to aid each school in developing a strong research faculty," Dr. Greenbaum said. Resources are growing to do just that. The schools of dentistry and nursing, for instance, have centers for research to aid in all steps of the research process, from grant applications to patent applications.

And residents are being trained in research at an increasing rate. "Many residency programs now require research," Dr. Greenbaum noted.

Dr. Greenbaum also is trying to foster more communication among MCG's clinical and basic researchers. "Laney Walker Boulevard seems to be a line a demarcation," he said. On one side of the street is the Carl T. Sanders Research and Eduation Building—chiefly the domain of basic researchers—and on the other is the hospital, the stomping ground of clinicians. The two groups cross paths much too infrequently, Dr. Greenbaum said. To remedy the situation, he has formed discussion

groups to match the two, including a series of monthly research programs titled "MCG Research Reports."

"The goal is to create a setting for clinical and basic science faculty to meet regularly to discuss research of interest to broad audiences," said Dr. Mohamed M. Sharawy, chairman and professor of oral biology/anatomy at MCG and chairman of the MCG Research Reports Committee.

Of course, faculty involvement is but one step toward the goal of an enhanced research reputation. The giant step is that ubiquitous sticking point: money.

"We currently have about $10 million in research funding," Dr. Greenbaum said. "We want to see that grow—and we know it can grow—to over $20 million in the future. We're doubled our research support over the past four years, but we want to see it double again. We're very confident we will do that."

The MCG Office of Grants and Contracts processes extramural grant applications (it processed more than 300 in fiscal 1989) and provides staff support for the MCG Research Institute Inc., an agency to advance MCG's research program and stature. The institute manages development of technology spawned from MCG research.

The office has had a busy year: MCG received grant or contract awards of more than $14 million in fiscal 1989. Private funding increased 57 percent over the previous year; corporate funding increased 67 percent.

But MCG—and every other institution seeking research funds—has to grapple with something of a catch-22 situation: extramural funds are hard to obtain until a solid foundation for the research has been established, and that foundation is hard to establish without funds.

The institute's small-grants program addresses this problem. Major research funders provide money to cover indirect research costs, such as facilities and personnnel. MCG supplies these resources, so the institute uses a portion of those costs as a nest egg for future research. Through the program, researchers can apply for grants of up to $10,000, which comes from the nest egg. This 'seed' money allows the research to get off the ground and have a better chance of qualifying for extramural research.

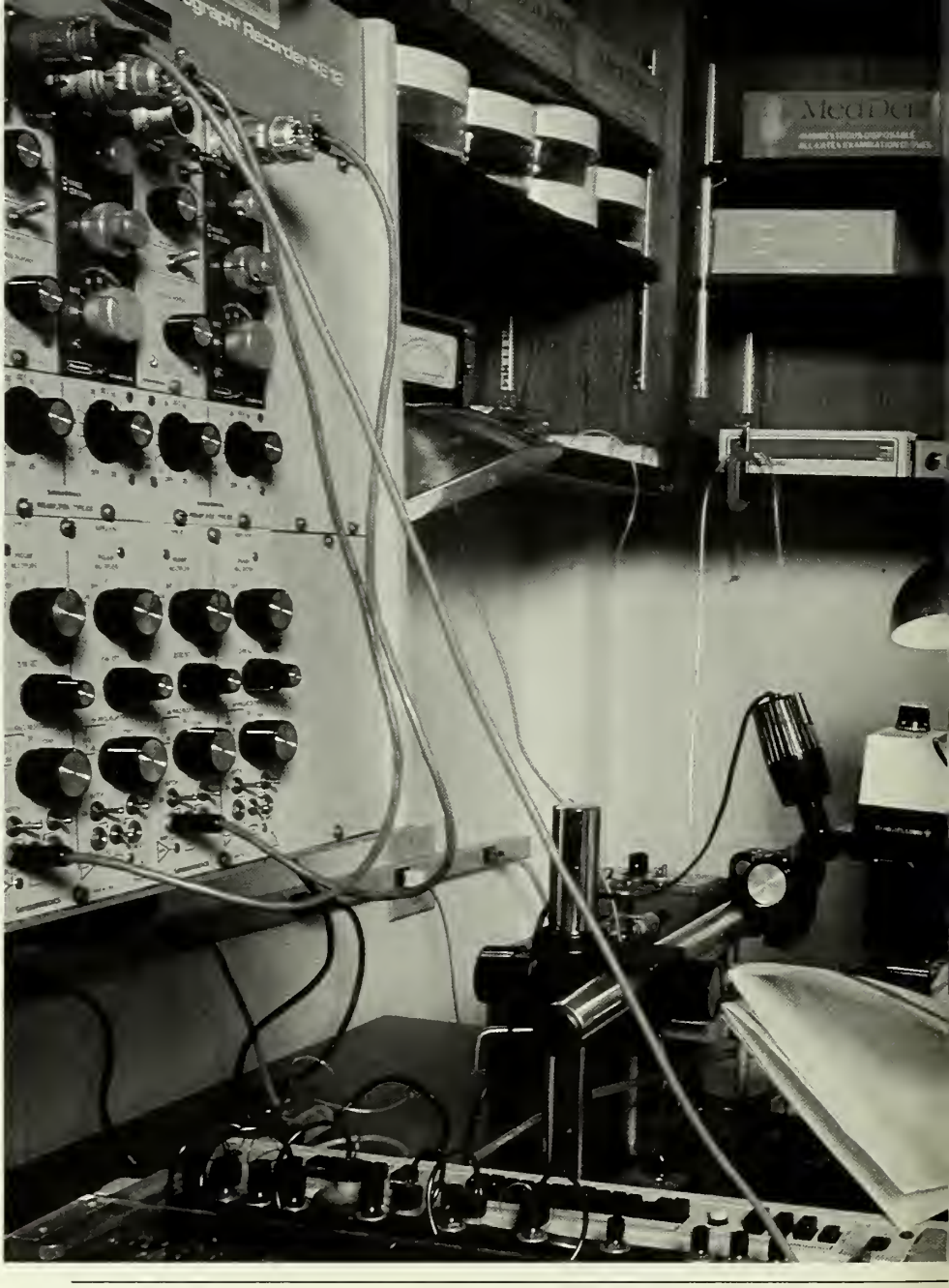
The University System of Georgia Board of Regents has also responded to this predicament by establishing the Special Funding Initiative—state funds to enhance research. An example of the effectiveness is MCG's research into Alzheimer's disease. The Special Funding Initiative enabled researchers to develop solid, impressive groundwork which led to a $1.2 million grant from LaGrange, Ga.'s Callaway Foundation Inc. to continue the Alzheimer's research.

That research is breaking new ground in the cause, diagnosis, treatment and possible cure of the disease. And that is the bottom line of MCG research: enhancing life. Dr. Greenbaum is proud of the school's contribution to the cause and excited about future plans.

"We want to enhance our strong areas, such as aging and vision, but we also have to recruit to enhance our weaker areas, such as AIDS and cancer. That doesn't mean we don't have good research in those areas. It simply means they're ripe for expansion." ■

—Christine Hurley Deriso

Editor's note: *Dr. Francis J. Tedesco, president of the Medical College of Georgia, is committed to enhancing the school's research mission. In this article, he answers questions about that mission.*



Presidential

Q. You've established research as a top priority as president of the Medical College of Georgia; you want it to be one of our major strengths. What are MCG's current strengths, and how does research compare?

A. I think MCG is very strong in the educational area. Our graduates are competent, caring health care providers. Between 60 percent and 80 percent of graduates from all five schools remain in Georgia and practice in Georgia. We get very, very high grades when we are evaluated as clinicians.

As far as patient care, once patients are brought to us, we do very well. But we're trying to enhance access to the Medical College of Georgia Hospital and Clinics by improving our referral system. The medical school dean and I have been traveling around the state to try to ascertain what improvements we need to make to enhance our outreach mission. We already make a major impact. We deliver care to 158 of 159 Georgia counties.

As new demands are put on MCG, I think our research performance will improve. Although we have some very outstanding researchers, we will have to recruit new basic- and clinical-sciences researchers to enhance that mission. That's the area in which I see the greatest opportunity for expansion.

Q. What are your specific research goals?

A. We want to correlate our research goals to impact citizens not only in Georgia but throughout the United States.

One specific area of research we want to pursue is aging. As our population grays, aging becomes an area of challenges and of opportunity. We also want to expand our cellular research. Knowing how cells work impacts on the understanding of so many areas of research interests, such as cancer and aging. We're also enhancing the areas of radiation biology and preventive medicine.

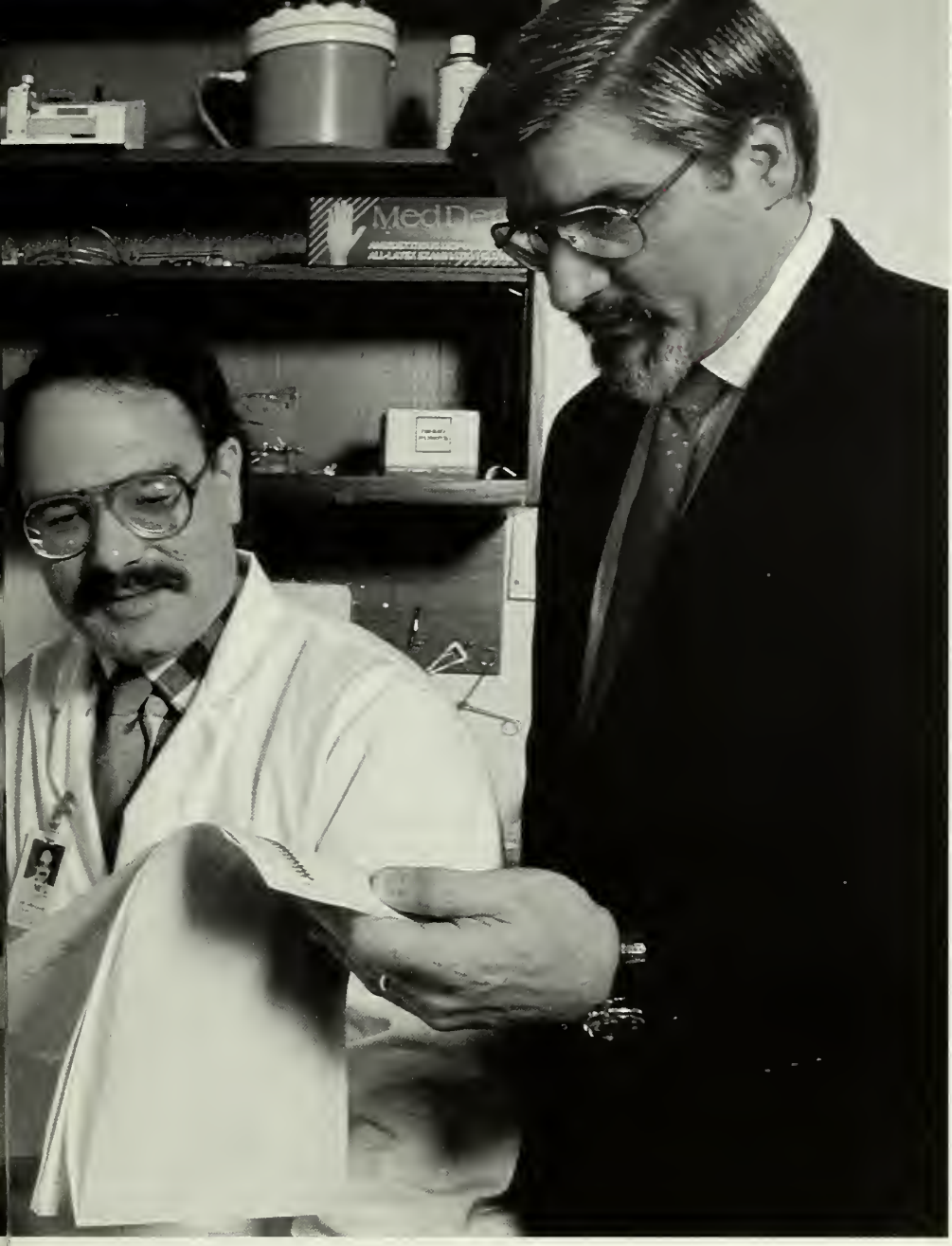
We already have very strong areas, such as developmental biology, which will continue to blossom and expand, and vision research, which is expanding and thriving.

We're also looking at the cost effectiveness of the some of the clinical things we do. We want to make up-front investments to make long-term savings.

Q. How do these goals differ from those of past administrations?

A. I'm not sure there's a significant difference. What there is is a greater realization that we have to be a major player in economic development. There's a clear awareness that the scope of expectations for the school has evolved and that research is the basis for all new knowledge.

Q. Does MCG have the resources



Dr Tedesco confers with MCG researcher Dr. Jerry Buccafusco.

Perspective

to achieve your goals, and if not, how might it attain them?

A. We're trying to put resources together from several sources to provide new research facilities. I'm committed to that. In the next two years, we're going to try to develop the financial base for such a facility.

I think the current facilities are adequate for now—I think we're probably ahead of the game with equipment—but as we look three to five years down the road, we see the need for additional facilities. As we expand our research mission and recruit new individuals, we will need them.

Q. Will attainment of your research goals cost us in other areas, such as education and patient care?

A. No, it should not at all. If anything, it should enhance both education and patient care. The three areas are so interwoven. There will not be a decrease in our commitment to any other area. We'll remain an outstanding educational institution.

Q. How has the faculty responded to your research initiatives?

A. With any perceived change, there comes a period of anxiety. However, I believe a large number of faculty have accepted the challenge. More and more are trying to see how they can contribute to it. Not everyone here will be able to be an extramurally funded researcher, but everyone can contribute.

Q. Time seems to be in chronic short supply among medical school faculty, who must devote themselves to research, teaching and patient care. Will this increased research focus overburden them?

A. I think there's going to have to be more direct involvement from the department chairmen and other administrators to address time management. It will be up to chairmen to protect time for funded investigators without taking away from patient care. We're trying to bring about a reorganization of time so each of these issues will be secure.

Q. How involved would you like students—including non-Ph.D. students—to be in achieving your research goals?

A. I think they should have exposure to research; I think it will make them think more critically. By and large, the major reason for their being here is to get an education, but I hope the excitement of the focus on research will affect everyone, including students.

Q. Have you cultivated a relationship with corporate and government leaders to interest them in our research? How have they responded?

A. We've had ongoing discussions with them. They're excited because they see this as key in enhancing economic development. We have a lot of support from both government and corporate leaders. Keeping them informed will be an ongoing project. We want them to know what we're doing; we want them to get excited about the Medical College of Georgia. ■

Tools of the Trade

Researchers at the Medical College of Georgia are constantly investigating disease and other health problems. This sort of research requires much from the scientist, but it requires much from the school in the way of research resources, as well.

Research in highly specialized health fields requires a variety of specialized equipment. For example, MCG's Biomedical Engineering Services designs and creates specialized instruments and computer programs for researchers when these items can't be obtained commercially.

"We apply engineering sciences to the medical field," said Dr. John Searle, director of the section of biomedical engineering. "Often research projects require specialized equipment in all three areas we work in: electronic and mechanical engineering and computer programming."

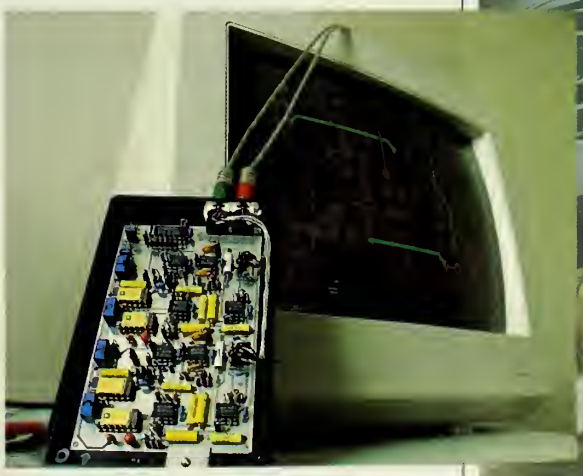
Dr. Searle is working on a device that measures and records the electric signals emitted by muscles in the lower back as they work. This information is correlated with reports from the patient about the severity of the pain.

Researchers who need a special instrument or computer program for their study can request it from biomedical engineering. Even if the researcher has only a rough draft of what he needs, Dr. Searle and his staff will work with him to create the specialized tool.

"Often the researcher knows what he needs to do, and he's seen something that he thinks might do the job," Dr. Searle said. "But if I work closely with him, we find that something a little different might work better in his case. My specialty is translating the researchers' needs into a physical solution."

For example, MCG researchers are studying Alzheimer's disease. They needed a special panel with different-colored lights and push buttons to study the memory of monkeys, specialized electronic equipment to allow the computer to control the panel, and a computer program to control the experiment and record the information. Biomedical engineering developed all of these for the project.

Research animals are another important resource for researchers at MCG. Many types of medical research simply can't be done in a test tube or a petri dish, and laboratory animals are necessary, according to Dr. J. Malcolm Kling, director of the Office of Research Support Services and associate vice president for environmental and occupational safety.



Dr. John Searle is creating a device to measure muscle activity, shown in inset.

Laboratory Animal Services involves the procurement, care and approval for research for all animals used at MCG. The division is registered with the Department of Agriculture and is accredited by the American Association for Accreditation of Laboratory Animals. The Department of Agriculture has strict regulations concerning the care of research animals, and MCG's facilities are checked by unannounced inspections several times a year.

Any researcher who needs to use animals in a study must submit a proposal to an independent MCG committee, the Committee for Animal Use, Research and Education. The researcher must explain exactly what procedures are to be conducted, how the animal will be cared for and anesthetized, the value of the study, and why the research requires live animals. The researcher may not begin any work with animals until after his study has been approved by the committee.

Mice and rats are the most commonly used research animals, according to Dr. Kling, although MCG has a wide variety of other species. Lizards are used in a study of hearing loss to better understand human loss of hearing caused by high-pitched noises. Birds are used in embryo-development studies, and some species of primates are used in opthalmology and memory studies. Other animals used are frogs, crayfish, guinea pigs, rabbits, cats, dogs, sheep and goats.

All animals are kept in conditions that meet or exceed federal regulations, according to Dr. Kling. For example, many of the cages have been modified to make one large cage out of what was designed to be two smaller ones. The dogs are kept at a rural facility, with indoor and outdoor areas.

Often, medical studies focus on disease and the body's reaction to it. This type of research requires several special facilities found at MCG, such as the hybridoma facility. The hybridoma facility can produce monoclonal antibodies, samples of one particular type of antibody, for researchers. Using DNA technology, they can even produce antibodies to something that has not yet been isolated, if the researcher has some genetic information about it. These antibodies are useful to doctors and researchers in a number of ways. For example, they can be used to diagnose various types of leukemia.

Other specialized clinical equipment available to researchers at MCG includes an electron microscope, magnetic resonance imaging, which can diagnose a number of diseases such as multiple sclerosis, and a cell sorter.

Much of a researcher's work must be done before beginning in the laboratory. First, a researcher must be familiar with any similar studies that have been done. This sort of research is conducted at the library, often with the help of special computer searches and librarians trained in locating this kind of information.

The library's computerized information system, called MERLIN, contains the library catalog and much more. It contains two literature data bases, called miniMEDLINE and Current Contents. These allow researchers to access citations and/or abstracts to over 750,000 journal articles simply by going to the library or by calling the library's computer from any other computer. Other data bases are available for searching in the library, as are other

The Gift of Life

Medical College of Georgia researchers are uncovering clues to a heart disorder linked to sudden death, including crib death.

Long QT syndrome is a condition in which the heart ventricle is thought to be slow in recovering from contracting. The name is derived from an electrocardiogram, which measures heart contractions. The time between the ventricle's beginning to contract (called the 'Q' wave) and the end of its relaxing phase (the 'T' wave) is abnormally long.

Potential results are severe and sometimes fatal heartbeat irregularities, fainting spells, cardiac arrest and deafness. And a Boston study determined that more than half of a group of infants who died from crib death had abnormally long QT intervals.

Dr. Michael J. Mulroy, professor of anatomy, and Dr. Theresa Harrison, assistant professor of anatomy, are studying chicken embryos to shed light on the condition.

"We'd like to find out the chain of events in development leading to it, and what initially caused the disruption," Dr. Harrison said. Their research, in its second year, is funded by a five-year National Institutes of Health grant and is part of a heart development project headed by Dr. Margaret Kirby, Regents professor of anatomy.

The condition is usually treatable. Automatic defibrillators shock the heart back into a normal beat when it becomes abnormal, and drug therapies are sometimes very effective. But many people die despite treatment, or before the condition is diagnosed.

"It's the kind of problem that isn't necessarily diagnosed early on," Dr. Harrison said. "Sometimes it doesn't present problems until a child is a little older and more active."

That may be too late. Drs. Mulroy and Harrison are probing the cause of the syndrome in hopes of laying the groundwork for more effective treatment and a possible cure.

In their research, they extract cells from chicken embryos. Dr. Kirby and her colleagues have identified cells that, when removed, generally result in specific defects of the heart or its nerve supply. There-fore, researchers know exactly which cells to remove to likely induce a heart defect—in this case, a long QT interval.

The cells removed from the chicken embryos are those which would eventually develop into the inner ear and into sensory nerves to the heart. "Those cells are right next to each other in the embryo," Dr. Harrison said, noting that the proximity probably explains the syndrome's potential side effect of deafness.

The embryos' development is monitored until they are almost ready to hatch. At that point, the researchers use electrodes to record their development. Most have long QT intervals and some are also deaf.

"Of course, our research doesn't stop there," Dr. Harrison said. "The point of inducing the syndrome is to try to under-

Drs. Michael J. Mulroy, Theresa Harrison conduct heart-defect research.

stand the sequence of events that produces it."

And although the research is in its infancy, that understanding is growing.

"There seems to be a decrease in the sensory nerves from the heart in our embryos," Dr. Mulroy said. "We think that results in the inability of the heart to react well. It is still a question whether this produces long QTs directly or indirectly, and just how this relates to the arrhythmias in people."

They anticipate that their research will eventually answer these and other questions about the syndrome. "And the more we understand, the better chance we have of learning how to intervene to really cure those who have it," Dr. Harrison said. ■

—Christine Hurley Deriso

It is among the cruelest of life's ironies that death sentences are sometimes unwittingly passed from one generation to the next.

Genetic, or inherited, diseases, can doom a child from the moment of conception. Some are fatal; others ensure a life of disability or poor health.

Dr. Barry Whitney, associate professor of the Department of Cell and Molecular Biology at the Medical College of Georgia, wishes those with genetic diseases could be cured before they were born.

Amazingly, his wish may eventually come true, partly due to his efforts.

"We're trying to find cures for genetic diseases," he said. "At the moment, there are treatments but no cures."

Dr. Whitney is conducting enormously promising somatic cell animal research in which he obtains cells from genetically

national data bases that a researcher must pay to search. Librarians also are available to do some of these searches.

Within the next year, MCG's computers should be able to communicate with computers at other universities in Georgia such as Georgia Institute of Technology, Georgia State University and the University of Georgia through a statewide computer link called PeachNet, according to Dr. William Thompson, director of the Office of Research Computing and Statistics. Georgia's universities currently cooperate on a number of research projects, but this will make it much easier.

Dr. Thompson's office also can help researchers with statistics, statistical design, experimental design, data collection and analysis, and building mathematical models.

"Ideally, we like to be involved from the beginning," said Dr. Thompson. "But we offer wide levels of support. We can just help set up a study, or just check that a researcher is on the right track, or we can be involved in the entire process."

When the office is involved in the entire research effort, the staff also helps write the paper and defend the manuscript before publication.

The office can help a researcher design his project, decide the best way to collect the information and help analyze the data. Several analysis and data base computer programs are available for researchers to use on their own through this office, and they are connected with the mainframe computer at the University of Georgia. Researchers can go to the computers, or they can call the office's large computer through a personal computer. ■

—Ingrid Heggoy

Dr. Barry Whitney

diseased mice, treats the cells and returns them to the mice.

The mice he works with have thalassemia, an inherited chronic and severe anemia, or lack of hemoglobin in the blood. In humans, the disease is a killer; even those treated for it with frequent blood transfusions rarely live past age 30. And frequent transfusions create a new set of potential health problems, such as thin bones due to excess bone marrow, and iron buildup in the heart and other tissues.

"Eventually, most die of complications from iron overload," Dr. Whitney said.

But the laboratory mice are responding dramatically to the experimental treatment, and Dr. Whitney hopes humans someday will, too. The research, now in its second year, is funded by a five-year National Institutes of Health grant.

The first step of the procedure is to remove cells from the bone marrow of the mice. "Bone marrow cells are special among human cells in that we're able to get them out and put them back without causing serious injury," he said.

The next step is to treat the cells in a test tube. Since every cell contains a complete genetic makeup, every cell of a mouse with thalassemia contains the genetic defect. Dr. Whitney combines the defective cells' DNA (cell material containing the genetic code) with a 'selectable marker.' In this case, that marker is the DNA of healthy cells that is especially resistant to a drug treatment.

"The selectable marker gives cells an advantage. They should proliferate faster," Dr. Whitney said. "They should take over the defective marrow system."

The manipulated cells then are injected back into the diseased mice with the hope that the healthy cells will proliferate and eventually outnumber the defective cells by a large enough percentage to cure the mouse of the disease.

"The research challenges are to get the DNA in efficiently and to get it to express efficiently," Dr. Whitney said.

Does it work?

"This works routinely with the mice," Dr. Whitney said. "This is leading-edge research. There is no place in the world closer to success in somatic cell research than we are here. We have a chance to make a real contribution."

The research is applicable not only to thalassemia, but to a host of genetic diseases, including many cancers. And the transplant of bone-marrow cells is tried and true as a safe procedure. Diseases already are being treated by replacing diseased bone marrow cells with healthy ones. But those healthy cells must come from someone with a nearly identical genetic makeup. Obviously, the procedure is useful to only a limited population.

"In the real world, you don't always have identical people to give transplants," Dr. Whitney said.

But the technique Dr. Whitney is researching—manipulating, rather than replacing, diseased cells—would be applicable to anyone.

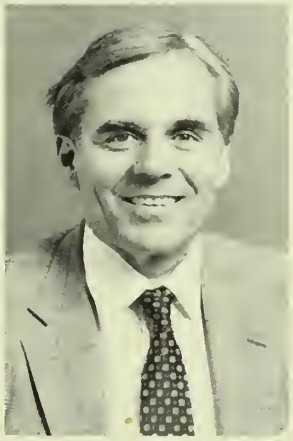
He envisions that the technology will be available to people in perhaps a decade. And since many genetic defects are detectable prenatally, the procedure can be done on fetuses, who then will join the world as healthy, rather than diseased and doomed, babies.

"We're not talking about trying to arbitrarily change the cells of an embryo," Dr. Whitney said. "We're trying to alleviate genetic diseases in those who already have it. We might be able to head it off before it starts."

But whether the technique is applied to fetuses, children or adults, the results should be the same, he said. "These gene therapy cures will be the first real cures for genetic disease." ■

—Christine Hurley Deriso

AlumNews



Dr. James B. Osborne

Dr. Osborne Named New Vice President

Dr. James B. Osborne has been appointed vice president for university advancement at the Medical College of Georgia.

As vice president for university advancement, Dr. Osborne has overall responsibility for the development, planning, implementation and coordination of all fund-raising activities, institutional advancement and development alumni affairs and media and press relations.

He assumed his duties Nov. 1.

Dr. Osborne earned his undergraduate and master's degrees from Morehead State University in Morehead, Ky., and his doctorate in education from East Tennessee State University in Johnson City, Tenn.

Previous professional positions include director of the University of Alabama at Tuscaloosa's Office of Cooperative Education and director for development and corporate relations at the Georgia Institute of Technology.

Most recently, he was vice president for development at Haggai Institute for Leadership Training, an Atlanta-based, privately supported organization that trains third-world leaders about Christian doctrine and leadership techniques.

Dr. Osborne has 11 years of fund-raising experience, including seven years in senior development positions. At the Georgia Institute of Technology, he was responsible for one of the nation's largest univer-

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Homecoming Activities Slated

Several activities are scheduled for the Medical College of Georgia's Homecoming May 3-5.

Registration will be held from 9 a.m. to 2 p.m. May 3, from 9 a.m. to 6 p.m. May 4 and from 9 a.m. to 4:30 p.m. May 5 at the MCG Alumni Center, 919 15th Street. All alumni, including those who have pre-registered, should stop by the center to check on reservations and pick up name tags, packets and Homecoming information.

Alumni may pre-register for Homecoming by mailing in the reservation form included with the Homecoming brochure, which will be mailed to all alumni in late February or early March. The brochure will include all Homecoming details and information, as will the spring edition of AlumNews.

Activities will kick off May 4 with a Homecoming golf tournament from 8:30 a.m. to 1:30 p.m. at Jones Creek Golf Club. Lunch will be provided. Alumni, residents, interns and faculty are invited to participate. They also are invited to attend the president's reception May 4 from 4:30 to 6:30 p.m. at the president's house on 920 Milledge Road.

Following is a list of activities for MCG's five schools:

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The Medical College of Georgia, responding to a campus survey, instituted a campuswide no-smoking policy beginning Jan.1, 1990. The purpose is to create and promote a healthy, smoke-free environment consistent with the overall mission of MCG, Georgia's health sciences university. The school is offering smoking-cessation classes and other assistance to employees trying to kick the habit. Irene Logan (left), who works in Institutional Relations, successfully quit several months ago.

Allied Health Sciences

Students Rally After Disaster

David Waller

MCG's Department of Respiratory Therapy responded magnanimously to the call for a "kinder, gentler nation" after Hurricane Hugo ravaged South Carolina in September.

Students and faculty of the department collected enough food, clothes, diapers and bottled water to fill three trucks. The idea was the brainchild of assistant professor Laura Hooker.

"Our class is so people-oriented, I thought this would be the perfect group to get it started," Ms. Hooker said.

Once the idea had overwhelmingly won the approval of the respiratory therapy students, a bulletin was put on the allied health computer network asking all students and faculty in the school to bring in items the following day.

"I was surprised at the number of donations," Ms. Hooker said. "We were worried that there be wouldn't enough to fill a truck, but we actually had more than we could carry."

The trucks were driven to a relief center in Charleston, S.C., by Jeff Hughes and Mike Higginbotham, respiratory therapy students, and Chuck Allen, husband of occupational therapy professor Virginia Allen. Mr. Allen volunteered his time and the use of his truck when more relief was given than had been anticipated.

When they arrived, the relief center was completely empty and people were standing around waiting for more assistance to arrive. The items were taken off the trucks and immediately distributed to residents of Charleston and the surrounding area.

"It's a great lesson for the students to learn how it feels to help somebody who really needs you," Ms. Hooker said. "Most of these kids don't have a lot of money, but they went out and spent what they had."

The relief effort brought the school together and, according to Ms. Hooker, gave the students a chance to prove that they chose a health career because they care about people and want to help relieve human suffering. ■

Allied health students collect donations for Hugo victims.

Administrative Council Reinstated

David Waller

A council to promote a better working relationship between the School of Allied Health Sciences and allied health professionals in the Medical College of Georgia Hospital and Clinics has been reinstated by Dr. Biagio Vericella, dean of the School of Allied Health Sciences.

The Allied Health Sciences Administrative Council is designed to maintain and enhance the relationship between the hospital and clinics administration and the school administration, discuss mutually desired objectives, implement collaborative activities and work toward the enhancement of education and patient care.

The council is composed of R. Edward Howell, hospital executive director, Dr. Vericella, Patricia K. Findling, assistant dean for clinical affairs, and Dr. Nancy Prendergast, associate dean for academic affairs.

The chiefs of each allied health department in the hospital and clinics and the school's department chairmen also will be on the council.

The council had its first meeting in September and will meet a minimum of once each quarter of the school year. ■

Dr. Nancy D. Prendergast

Dr. Prendergast Named Associate Dean

David Waller

Dr. Nancy D. Prendergast has been named associate dean of the Medical College of Georgia School of Allied Health Sciences. She replaces Dr. Biagio Vericella, who was appointed dean of the school earlier this year.

Dr. Prendergast has been chairman of the MCG Department of Occupational Therapy since 1971. Prior to joining MCG, she was assistant professor of occupational therapy at Temple University.

Dr. Prendergast received her bachelor's degree from Ohio State University in 1954. She earned her master's in education from Temple University in 1970 and her doctorate from the University of Georgia in 1984.

"Dr. Vericella and I have always worked well together and I think I can really help him accomplish some of the things he wants to do for the school," Dr. Prendergast said.

One of Dr. Prendergast's major goals is increasing the amount of research in the School of Allied Health Sciences.

"I will be doing a lot of the leg work," Dr. Prendergast said. "With the heavy load that the faculty has in allied health, it really helps to have someone who can do some of the primary work toward funding and proofing papers."

"Dr. Vericella and I have always worked well together and I think I can really help him accomplish some of the things he wants to do for the school."

Dr. Prendergast is married to Robert M. Prendergast and has four children, Robert Jr., Francis, Suzanne and Elizabeth. ■

Dr. Prendergast Awarded Grant

David Waller

Dr. Nancy D. Prendergast, associate dean of the School of Allied Health Sciences, has been awarded a $123,000 grant by a division of the Department of Health and Human Sciences.

The Health Resources and Services Administration has asked Dr. Prendergast to chair a task force assigned to develop a program to help allied health professionals make the transition to higher education.

Under the agreement, Dr. Prendergast will lead a group of professionals representing four-year colleges and universities, academic health science centers and professional associations. They will develop a strategy for teaching allied health professionals entering the teaching field to plan and implement an academic career.

The program is part of the federal government's response to the current shortage of allied health professionals. That shortage is partially the result of a lack of qualified instructors.

"Those of us who are in academics can only teach so many students," Dr. Prendergast said. "We need more instructors in this country."

The committee will have one year to develop workbooks and teaching guides that will eventually be used as part of seminars for those entering the teaching field from an allied health practice background. ■

Ms. Findling Named Assistant Dean

Patricia K. Findling, associate director of the Medical College of Georgia Hospital and Clinics, has been appointed assistant dean for clinical affairs in the Medical College of Georgia School of Allied Health Sciences.

The newly created position will serve as a liaison between the hospital and school, and Ms. Findling will maintain both positions.

Ms. Findling received a bachelor's degree in physical therapy from Ohio State University in 1972. She earned her master's degree in hospital and health services administration in 1978.

She has held positions in several hospitals, including vice president of clinical support services, assistant executive director and program director.

Ms. Findling will be a part of the newly formed Allied Health Sciences Administrative Council. The group's first meeting was part of National Allied Health Sciences Week Sept. 24-30. ■

A Message from the Alumni President

David V. Hamilton

First of all, I would like to thank you for the opportunity to serve as the president of the Allied Health Sciences Alumni Association. I consider this to be a great honor and privilege.

I am a 1985 graduate of the School of Occupational Therapy. I have lived in the Augusta area all of my life. I have practiced occupational therapy in Georgia and South Carolina since graduating from MCG. I am currently employed with NovaCare Inc. in Augusta as a district manager supervising occupational, physical and speech therapists and assistants. I am also currently serving on the South Carolina Board of Occupational Therapy. I am a member of the American, Georgia and South Carolina Occupational Therapy Associations.

One of my goals as president will be to increase the participation of all alumni from the allied health schools. I feel that it is very important to remain active with MCG and to encourage prospective students to attend MCG.

I look forward to serving you, and if I can be of assistance, please do not hesitate to call me at (404) 737-0181. ■

Allied Health Sciences Alumni Association Officers

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(Term ends 1991)
(404) 737-0181

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Grace Yrizarry
(Term ends 1991)
(404) 790-2680

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Dentistry

Dr. David R. Myers

New Dean Covers All Bases

Ingrid Heggoy

Dr. David R. Myers, the new dean of the Medical College of Georgia School of Dentistry, works hard to be much more than "just another pencil pusher."

Although being dean is a full-time job, he still teaches classes, and he spends at least one afternoon a week in the pediatric dentistry clinic, as well as treating private patients.

"I was a pediatric dentist before I became a dean, and I'll be one afterwards," he said. "I think it's very important to continue my involvement in teaching and patient care."

"I guess I don't view myself as a full-time, pencil-pushing administrator. It's just not my style."

But as dean, he knows what directions the school needs to move in during the 1990s. He wants to keep a strong emphasis on the pre- and postdoctoral programs, modernize the school's teaching methods and increase faculty research.

"We need to look at our curriculum and make some revisions, to modernize the program. Right now, like most dental schools, it's pretty traditional—the lecture method."

Dr. Myers wants to supplement lectures with innovative teaching methods such as computers and simulations in the classroom, which he feels would help to make the students more effective in patient care.

"I was a pediatric dentist before I became a dean, and I'll be one afterwards. I think it's very important to continue my involvement in teaching and patient care."

He sees other changes in dental education as well.

"Dental education is going through a great time of change right now.

Four dental schools have closed in the past year and Emory University has phased out its predoctoral program. Some schools are deciding that dentistry isn't an integral part of their academic programs anymore," Dr. Myers said.

"We don't want that to happen here. We want to carry our own weight, and provide educational programs and services that people need." Funds are a problem for the dental school, he said, in part because federal support for education has decreased dramatically in the past several years.

"This means schools have to be more efficient and cost conscious, and have to aggressively seek external funds. Educating a dentist is an expensive process, and the federal funds have just dried up," Dr. Myers said.

Although his days at work are filled with the intricacies of running the dental school, he still finds time for his family and other interests.

He and his wife, Ann, have two children. Debbie, a graduate of Clemson University, is earning a doctorate of pharmacy at the University of Georgia.

Their younger daughter, Beth, is a junior at Georgia College in Milledgeville, majoring in business management.

Dr. Myers said he likes to run "about five or six miles a day, almost every day." He also enjoys waterskiing—"in the summer, when I have time"—photography, watercolor painting—"when I'm on vacation"—reading, and stamp collecting—"it's a good winter hobby." ■

Dental Students Awarded

Several Medical College of Georgia School of Dentistry students received scholarships and awards recently at the school's third annual Omicron Kappa Upsilon Student-Faculty Assembly.

OKU is an international dental honor organization which selected dental seniors in the top 20 percent of their class are invited to join.

Senior dental students Tonya Baker and Brad Snipes, juniors Jesse Robinson and Jerry Spillers, sophomores John Frantz and John Harrell and freshmen Whitney Troope, Brian Hall, George Hall and Clarence Cheek each received a Georgia Dental Education Foundation scholarship of $1,000.

Ms. Baker and Mr. Snipes also were recipients of the $1,000 first annual Emile T. Fisher OKU Award for Academic Excellence.

Freshmen Richard Meaders, Michael Kelly and Greg Morris received Emile T. Fisher scholarships for $1,000. In addition, Mr. Meaders and Mr. Kelly also received $2,000 School of Dentistry faculty scholarships.

Al Pesto, a senior, received the Emil Eisenberg Scholarship of $400.

Other awards also were presented.

Junior Jesse Robinson received the William S. Kramer Award of Excellence.

Juniors Marcos Caceres, Paul Gilreath, Stanley Prince, Jesse Robinson, Jerry Spillers, Glenn Sosebee, Edward Wall and Dean Younce received OKU certificates of recognition.

Dr. James Earl Williams, a professor and chairman of the MCG Department of Community Dentistry, received the Faculty Professionalism Award sponsored by the American College of Dentists.

Dr. James Moncrief, a periodontist from Athens, Ga., and chairman of the GDA Ethics Committee, discussed professional ethics in dentistry at the assembly. He told the students that although they should be competitive, the wrong kind of competition is unhealthy and counterproductive. Therefore, competition should be directed toward making each student a better dentist, he said.

Each individual is responsible for setting the ethical standards for dentistry, he said.

"How a profession perceives its importance sets the level that profession will attain," he said. "Each of us sets the level of ethics in professional dentistry every day, as we practice.

"If we keep our patients' welfare foremost, then we'll be fine. We'll be promoting the highest level of ethical professionalism among our ranks," he said. ■

Dr. Utermark in the Driver's Seat

Ingrid Heggoy

She drives a great big Ford pick-up truck and rides Tennessee walking horses. And she's an active Medical College of Georgia School of Dentistry graduate, with specialties in pediatric dentistry and orthodontics.

Dr. Barbara Utermark, class of 1976, loves what she's doing. All of it. Even if most of the rest of the world couldn't possibly keep up with her.

"I'm really lucky in that I really love what I do. I have a lot of diversity, from young children in pediatric dentistry to teens and adults in orthodontics," Dr. Utermark said.

She didn't always plan to have two specialties.

"I was a general dentist for five years after I graduated," she said. "For two years I was at MCG's Children and Youth Clinic, and I became interested in pediatric dentistry. I guess the person who influenced me most was Dr. (David) Myers—he's just a wonderful clinician." Dr. Myers is dean of the dental school.

In 1979, Dr. Utermark left MCG to teach at the Louisiana State University School of Dentistry. She decided to return to school three years later to complete a residency in pediatric dentistry, during which time she became interested in orthodontics. So, immediately after finishing her pedodontics residency, she began one in orthodontics.

She began what has grown to be a very successful private practice in both specialties in Augusta in 1985, although again she said she's surprised by the turn of events.

"When I first got out of dental school, I thought I would go into academics rather than private practice," Dr. Utermark said. "I think one day I would like to teach, but it would be a hard decision between pediatric dentistry or orthodontics."

"I'm really lucky in that I really love what I do. I have a lot of diversity, from young children in pediatric dentistry to teens and adults in orthodontics."

Dr. Utermark lives in Columbia County on several acres of land with her husband, Dr. David Dickey, an endodontist with a private practice in Augusta and an assistant clinical professor of endodontics at MCG. Both are also busy with various dental organziations. Dr. Dickey is president of the MCG School of Dentistry Alumni Association. Dr. Utermark is chairwoman of Children's Dental Health Month sponsored by the Eastern District Dental Society, and president of the Georgia Society of Dentistry for Children.

They are both interested in horses, and they have six Tennessee walkers. In addition, they have "between 12 and 20 dogs, depending on when you look," according to Dr. Utermark, and three cats. She explained the varying number of dogs: "A Springer Spaniel, two labs and a German Shorthair are pets, and the others are hunting dogs, English pointers. The number of hunting dogs fluxuates somewhat."

Dr. Utermark said she enjoys being married to a fellow dentist.

"It's nice to be able to share back and forth with David, especially on the business side when I first set

Dr. Barbara Utermark shares a tender moment with her horses.

up my practice. I was new at it, with lots of questions, and he had already been in business four years, so he was a lot of help.

"In general, I think being married to a dentist is an asset. I think it helps you understand the stresses. Dentists tend to be perfectionists, and the business can be frustrating. You can really understand the other person's problems and stresses.

"Of course a problem is finding time, but that's a problem I think any professional couple has. It helps that we have common interests like the horses." ■

Dr. Gangarosa Lectures in Japan

Dr. Louis P. Gangarosa, professor and coordinator of pharmacology in the Medical College of Georgia School of Dentistry, was the guest speaker at five meetings in Japan July 16-21.

On July 16, he discussed "Uses of Iontophoresis in Endodontics," sponsored by the Japanese Endodontic Society in Tokyo.

On July 17, he discussed "Dermatological Applications of Iontophoresis," sponsored by the Department of Dermatology at Tokai University in Isehara. On July 19, he discussed "Update in Dental Applications of Iontophoresis," sponsored by the Kanagawa Dental College and Kanagawa Odontological Society in Yohosuka.

On July 20, he discussed "Treatment of Herpes Simplex and Herpes Zoster Infections by Iontophoresis," sponsored by the Department of Ophthalmology at the Osaka Medical University in Osaka.

On July 21, he discussed "Post-Herpetic Neuralgia treatment by Iontophoresis," sponsored by the Ophthalmology Department of Rosai Hospital and Osaka Medical University in Osaka. ■

Two Continuing Education Programs Offered

The Academy of General Dentistry and the Medical College of Georgia School of Dentistry Alumni Association will sponsor a continuing education program May 5 featuring Dr. Gordon J. Christiansen, a nationally recognized general dentistry lecturer.

The AGD MCG Lecture and Scholarship Program will be held in room AD-100 of the MCG dental school. Lectures will be from 8:30-11:30 a.m. and 1-4 p.m.

The program, titled "New Aspects of Dentistry—1990" will include topics such as a comparison of resins and techniques for anterior and posterior teeth, bleaching vital teeth, a comparison of implants for routine use, a fixed prosthodontic update, restorative dentistry update and new concepts in infection control. He also will discuss many other new techniques and materials recently evaluated by Clinical Research Associates.

Dr. Christiansen, one of the nation's top dental lecturers, is an adjunct professor at Brigham Young University, a clinical professor at the University of Utah, and a member of the postgraduate faculty of a number of dental schools.

The course offers continuing education credit, and enrollment is limited to 200. The cost is $75 for School of Dentistry Alumni Association and AGD members, $150 for non-members. If space permits, auxiliaries may attend for $50. Lunch is included in the cost of the program.

All funds raised by the program will go toward scholarships for MCG dental students.

A second dentistry continuing education course will be offered May 6 at MCG at the dental school. Dr. Arun Nayyar, associate professor of restorative dentistry at MCG and director of fixed prosthodontics, will speak on understanding porcelain veneers and indirect posterior composite systems. Course cost is $250.

For more information on either of these programs, please contact the MCG Office of Continuing Education at (404) 721-3967. ■

Dr. Lefebvre Joins Faculty

Ingrid Heggoy

Dr. Carol Lefebvre joined the MCG School of Dentistry faculty this fall as an assistant professor of prosthodontics and director of the partial denture program.

Dr. Lefebvre earned a doctor of dental sciences degree and a master's degree in removable prosthodontics from the University of Michigan School of Dentistry.

She taught removable prosthodontics at Northwestern University for three years before joining the faculty at MCG.

Dr. Lefebvre became interested in prosthodontics when she was offered a one-year teaching position at the University of Michigan after graduating from dental school.

"I taught complete dentures for a year, from 1983 to 1984. Implants were just beginning to come out, and it just really sparked my interest, so I decided on prosthodontics," she explained.

Dr. Lefebvre said she enjoys teaching, although when she graduated, she was more interested in going into private practice.

"When I went to graduate school, I was headed toward private practice, but when I got to Northwestern, I became more involved with academics. I think one of the things I like about here (MCG) a lot is that I can do some of both, and get the variety.

"I decided to stay in academics because I really like the interaction with students, and it's an interesting way to keep up with the latest technological innovations. And I can do research here, which I really wouldn't be able to do in private practice."

Dr. Lefebvre and her husband, Kevin Corbin, supervisor of the outpatient pharmacy at MCG, have made the transition to southern living smoothly, she said.

"I think Georgia is great. Augusta is nicely located—close to the mountains, the ocean, and Atlanta. It just doesn't have the horrible winters."

Outside of work, Dr. Lefebvre enjoys traveling—"anywhere I get the chance to go"—gourmet cooking, needlework and football and basketball games—as long as Michigan is one of the teams. ■

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Graduate Studies

Dr. Ata Abdel-Latif works in laboratory

Dr. Latif Awarded MERIT Grant

Dr. Ata Abdel-Latif, Regents professor of cell and molecular biology at the Medical College of Georgia, has been awarded a $2 million, 10-year grant to continue his cellular research.

The grant, a Method to Extend Research in Time (MERIT) award, is sponsored by the National Institutes of Health. The MERIT program provides eight to 10 years of continuous research grant support.

Dr. Latif's research has been supported by the NIH since 1965. His research resulted in his and his colleagues' 1984 discovery of the process which activates the release of calcium ions within a cell. The affected cells contribute to such functions as muscle contractions, secretions of food-digesting enzymes and production of eye fluids.

Understanding of the process has laid the groundwork for development of drugs that can manipulate the cells and likely improve treatment for such conditions as glaucoma and high blood pressure. ■

Research Presented November 17

Medical College of Georgia students were recognized for their research during Graduate Student Research Day Nov. 17 at MCG.

The annual event includes poster presentations of their research and tours of the graduate school's departments for visiting undergraduate students and their advisers.

The students' research was judged by a group of MCG faculty and winners were honored at an awards ceremony that evening.

The awards, winners and the topic of their research are:

Sigma Xi award

Physiology/endocrinology student Yu Zhu, inositol 1,4,5-trisphosphate (IP3); faculty adviser, Dr. Thomas M. Nosek.

Excellence in Research awards

Physiology/endocrinology student Aruna Chakravorty, estrogen's effects on follicular development; faculty adviser, Dr. Thomas M. Mills.

Pharmacology/toxicology student Leland N. Holland, substance P; faculty adviser, D. Barry D. Goldstein.

Physiology/endocrinology student Theresa A. Kellom, GnRH pulsatility; faculty adviser, Dr. James L. O'Conner.

Physiology/endocrinology student Carla Putnam, gonadotropin secretion; faculty adviser, Dr. Virendra B. Mahesh.

Medical illustration student Carrie L. DiLorenzo, computer-assisted instruction; faculty adviser, Dr. William Stenstrom.

Honorable mention

Pharmacology/toxicology student Jian Wei, vesamicol; faculty adviser, Dr. Jerry J. Buccafusco.

Physiology/endocrinology student Mary L. Rosser, estradiol; faculty advisers, Drs. Thomas M. Muldoon and Virendra B. Mahesh.

Adult nursing student Melody Heffline, postanesthetic shivering; faculty adviser, Dr. Barbara Brown.

August Roesel Memorial award

Cell and molecular biology student Yeini Thompson, T-kininogens; faculty adviser, Dr. Eugene F. Howard.

Departmental award

Physiology and endocrinology. ■

Dr. Lewis Joins Faculty

Dr. Deborah L. Lewis has joined the Medical College of Georgia as an assistant professor in the Department of Pharmacology and Toxicology.

Dr. Lewis, a native of Florence, S.C., earned a bachelor's degree in zoology and a master's degree in bioengineering from Clemson University in South Carolina. She earned a Ph.D. in neurobiology from Kent State University in Ohio.

Dr. Lewis was a teaching fellow in neuroanatomy at the Northeastern Ohio College of Medicine from 1981 to 1982 and an instructor in biology and psychology at Hiram College in Ohio from 1982 to 1983.

She was a staff fellow in the Laboratory of Preclinical Studies at the National Institute on Alcohol Abuse and Alcoholism in Rockville, Md., from 1983 to 1985. She was a senior staff fellow in the Laboratory of Neurophysiology at the National Institutes of Health in Bethesda, Md., from 1986 to 1988 and a research associate in the Mayo Clinic Department of Pharmacology in Rochester, Md., from 1988 to 1989.

Dr. Lewis is a member of the Society for Neuroscience. ■

School Sponsors 'Research Reports'

The Medical College of Georgia School of Graduate Studies is sponsoring a series of monthly programs called "MCG Research Reports." The first was presented Oct. 31. The series, free and open to the public, features a research topic and a panel of topic experts to discuss the subject and answer questions from the audience.

The School of Graduate Studies has sponsored the series for four years, but in the past, the programs were limited to single speakers discussing their research. Dr. Lowell M. Greenbaum, dean of the school and vice president of research at MCG, hopes the new format will attract a broader audience.

The goal of the program is to create a setting for clinical and basic science faculty to meet regularly to discuss research of interest to broad audiences, according to Dr. Mohamed M. Sharawy, chairman and professor of oral biology/anatomy at MCG and chairman of the MCG Research Reports Committee.

Future topics include cardiovascular disease, AIDS, epilepsy, trauma and aging. The dates are Jan. 30, Feb. 27, March 27, April 24 and May 29. ■

Dr. Roesel Dies

Dr. R. August Roesel, associate professor of cell and molecular biology at the Medical College of Georgia, died Aug. 21. He was 51.

Dr. Roesel, a lifelong Augusta resident, earned a bachelor's degree in chemistry at Emory University in Atlanta and a Ph.D. in biochemistry at the Medical College of Georgia.

He was a biochemistry graduate research fellow at MCG from 1962 to 1965 and a biochemistry research assistant from 1965 to 1973. He was named research associate of cell and molecular biology in 1973, a graduate teaching assistant in 1975, research associate scientist in 1977, assistant professor in 1982 and associate professor in 1987.

He also had been director of the metabolic evaluation section of the MCG and Gracewood State School and Hospital Biochemical Genetics Laboratory since 1981. He was editor-in-chief of the Georgia Journal of Science, the official publication of the Georgia Academy of Science. ■

Faculty Awarded Fellowship

Dr. Jose M. Gonzalez-Redondo, assistant professor of cell and molecular biology at the Medical College of Georgia, has been awarded a second-year research fellowship from Cooley's Anemia Foundation Inc.

The New York-based foundation supports research related to thalassemia, an inherited chronic anemia resulting from faulty hemoglobin production.

Dr. Gonzalez-Redondo is working to characterize a specific type of thalassemia - beta thalassemia - in American blacks. He hopes better understanding of the disease will lead to prevention via prenatal diagnosis and genetic counseling.

He will receive $20,000 from the foundation to further his research; he was awarded $15,000 in 1988. ■

A Message from the Alumni President

Dr. Dave Welter

Last night, I participated in my first Graduate Alumni Association phonathon. I was somewhat apprehensive about calling friends, colleagues and fellow alumni and "begging" for money. However, excitement mounted as I selectively separated from nearly 300 alumni data forms about 30 alumni who I had become acquainted with since my entry as a graduate student in anatomy in 1961.

Some of these individuals I had not talked with in 27 years. As I began to call, it became apparent that some of these alumni had had very little or no contact with MCG since their graduation. I was hoping to find out, during our conversation, where they were employed, how their career developed and other personal bits of information, but it became apparent that they wanted to know about MCG. It really came home to me after several hours of renewing old acquaintances and "begging for money" that I had a message to tell.

Since I didn't get a chance to call all of you, I would like to share some of my thoughts about our graduate program. Just a few words about myself and my source of information. I received from MCG my master's in anatomy in 1962 and Ph.D. in anatomy in 1970. I have been employed or faculty in the Department of Anatomy since 1962.

I am an associate professor of anatomy with appointments in the Schools of Medicine and Graduate Studies. I was the first to receive a graduate degree in the department and one of the first from the graduate programs at MCG. The information presented here was extracted from the history of the graduate program, which I am currently writing, from the 1988-89 annual report of the school and from the 1990 SACS accreditation document.

In researching the history of the school, I discovered that graduate students first appeared in the yearbook in 1962. Eight of us were in the program that year. We all had space in the back of our mentors' labs, if they had a lab. We all begged, borrowed or snitched animals, chemicals, equipment and other materials to make progress. Only one of the students was in a department that had a secretary.

The current annual report for graduate studies reported that we have 220 graduate students, eight Ph.D. programs, 10 master of science programs and four master of health education programs. The graduate faculty numbers 158 from the four other schools and administration. We awarded 46 graduate degrees during 1988; 15 were Ph.D.'s.

Students who qualify receive stipends over $9,000 per year and tuition assistance. Last year, there were 121 student research publications and 24 students participated in regional and national meetings. Each year, the graduate students compete for honors and cash at our own Graduate Student Research Day in November. Many of our students are multidisciplinary. This requires coordination and sharing by the entire scientific program. The students no longer have to "beg, borrow or snitch" material, equipment, etc., because of the state-of-the-art equipment available to them.

Much is available for most graduate students, but more is also needed. The Graduate Alumni Association has taken on the responsibility of helping the graduate students in several areas. Two notable areas are the Sam Singal Travel Fund to assist the students with travel to present their research findings at regional and national meetings; the other is the R. August Roesel Memorial cash award for an outstanding research presentation at the annual Graduate Student Day. As our àssociation and its funds grow, we plan to extend our assistance to the development of the best possible graduate student.

When I think of where we were 25 years ago, where we are today and where we will be 25 years from now, I get very excited about calling more of our alumni tonight. ■

School of Graduate Studies Alumni Association

(Term's expiration in parentheses)

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Medicine

New Dean Savors Medical Career

Toni Baker

Medicine took an early and fast hold on Gregory L. Eastwood. As a sixth-grader, he sat in Sunday school and listened to a young surgery resident talk about life and a little about medicine.

Dr. Gerald Wilson piqued the interest of the Detroit youngster and became his friend.

By high school, he was making hospital rounds with Dr. Wilson.

After his first year of pre-med at Albion College in Albion, Mich., he spent summer mornings handing Dr. Wilson instruments in the operating room and afternoons and evenings dissecting cadavers.

"I have asked the question many, many times of medical school applicants in my capacity as associate dean of admissions at the University of Massachusetts: 'Why do you want to be a doctor?'" said the new dean of the Medical College of Georgia School of Medicine.

"I'd always get answers which are roughly the same. They cluster around the idea of, 'I want to be of service to mankind. I'm interested in

Dr. Gregory L. Eastwood

science, but I'm also interested in people.' Those kinds of answers. I would give those answers, too," Dr. Eastwood said.

"But I don't think anyone can really honestly answer that question. I don't think I can. In order for me to answer that question, I would have to go very, very deep inside. It has to do with wanting to serve and be of use and feel that you have spent your life in a worthwhile manner and also being grateful for the opportunity to serve," he said.

"That perspective has been applied to everything along the way. The chance that I have right now to be dean of this medical school is consistent with my view that I am grateful for the chance to serve and contribute."

If Dr. Eastwood hadn't known Dr. Wilson, he might have taken his keen interest in science and working with his hands, and built buildings. As a child, he made tree houses and created detailed drawings of buildings and cars.

"I think the respect that I saw Dr. Wilson accorded probably was a factor. But I think the main thing is that I saw a career in medicine as being a very worthwhile way of spending your life.

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Dr. Collins Follows His Heart

Toni Baker

William Coppedge Collins was told to become a physician by a voice that was neither ethereal nor his mother's.

High school science teacher Florence Vaughn, who "to this day is the smartest teacher that I've ever had in my entire life," laid it on the line for the young Forsyth, Ga., teen pondering his future.

"Somewhere along the way, I think I told her that I was going to be a television announcer or something like that," recalled Dr. Collins. "She looked me square in the eye and said, 'Collins, that's the damnedest thing I've ever heard in my life. You are a very good student and an excellent science student. There is really nothing else that you should do except practice medicine. Anything else that you do would be letting me down.'

"I guess from that point on I thought that I was going to be a doctor," said the 1989 alumni association president of the Medical College of Georgia School of Medicine.

His family doctor—Dr. George Alexander—also stirred in young Collins feelings that fanned that flame.

But the cold reality was how the last of four born to a hard-working couple could ever afford the expensive education that would get him where Mrs. Vaughn had pointed.

George Collins worked 15-hour days at the family's small restaurant. Annie Joye Coppedge Collins became a teacher in the days when a degree was not required. She'd quit to raise the children. But with expenses mounting and one child still facing college and maybe more, she went back to school so she could teach again.

Mrs. Collins graduated from college and her son graduated from high school at the same time. Between the two of them, they'd managed to save $300 for young Collins' college education.

So their son took the required entrance examination and enrolled at the University of Georgia.

One day he got a call summoning him to the student aid office. He learned that General Motors Corp. had a national scholarship program for students who scored the highest on college entrance examinations. And, he learned that GM would pay for his entire college education. "That took care of that," said Dr. Collins.

Still an expensive medical education lay before him. Then the sun shined again.

He found a newspaper notice about a program than loaned state dollars to fund medical education—the

continued on page 21

Dr. William Collins chats with first-year medical students at an alumni association-sponsored brunch in the fall.

New Dean... *cont. from pg. 19*

Something that was not a job, but a way of life."

He remembers, as a freshman at Albion, studying how the body works and savoring a taste of what it is to be a doctor. Looking back, he says he may have been naive.

"But so what. I (see) that kind of enthusiasm in other students now and it's sad that idealism and enthusiasm fades. I think that is one of the real challenges we have as medical educators and as physicians in general, to maintain that enthusiasm and idealism. I think that is why the medical profession is criticized so much. We are perceived as becoming hardened."

He also remembers, as a junior at Albion, seeing freshman math major Lynn Marshall sitting in the front row of his Russian language class. The two would marry between Dr. Eastwood's second and third years of medical school.

For medical school, Dr. Eastwood followed his mentor to his alma mater, Case Western Reserve University School of Medicine, where he found an environment which met and exceeded his expectations.

The school's integrated curriculum gave freshmen a taste of patient care instead of making them wait until their third year. Every freshman was assigned a patient, a pregnant woman they would follow through delivery and for two years.

Dr. Eastwood began to lean toward the breadth and depth of internal medicine and pursued an internship and residency at the Hospital of the University of Pennsylvania in Philadelphia. He stayed on for an additional year as chief resident at the affiliated Philadelphia Veterans Administration Hospital.

As a resident, he was drawn to gastroenterology. During the late 1960s, it was not a specialty filled with today's extensive gadgetry. It was the physiology of digestion that fascinated him: swallowing, the biochemistry of metabolism of the liver, pancreas and other organs.

He was fascinated by the body's ability to constantly renew the lining of the gastrointestinal tract. By the fact that an 'ulcer' created by a biopsy during endoscropy heals quickly while ulcers that develop on their own may never completely heal. "I spent much of my professional life trying to figure that out. So have other people," Dr. Eastwood said.

He'd planned to return to Michigan and continue his studies with a gastroenterology fellowship at the strong clinical program at the University of Michigan.

But a group of innovative research minds was working together at Boston University Medical Center and a two-year National Institutes of Health fellowship became available there.

The NIH fellowship was followed by a two-year stint in the Navy where he worked largely as a clinician.

This fortunate coupling of research work followed by patient care planted him firmly in the academic health arena.

"I think there is this real stimulation of teaching, being in an environment where things are new and fresh," Dr. Eastwood said. "Students are there. People learning. You feel that even though one may not contribute in any real seminal way, you may not get a Nobel prize, still there is that feeling that you contributed in some way to the advancement of the field."

Dr. Eastwood's academic medical career would take him from Jefferson Medical College to Harvard Medical School to the University of Massachusetts Medical School.

In Massachusetts, he was promoted up the ranks from associate professor and director of the gastroenterology division to tenured professor.

Then one day his neighbor, who also happened to be associate dean of admissions, asked if he'd like his job. His neighbor was being made dean of the medical school.

"I said, 'Are you kidding? No.'" But that night he made a 180-degree turn. He'd been on the University of Massachusetts Medical School's Admissions Committee for five years so obviously he was interested in the process. He'd been with the school's gastroenterology division for seven years and was starting to get that itch.

He was made interim associate dean in 1985 and given the job officially within a year.

The position provided the opportunity to see how administration worked and felt.

It felt good.

When he heard about the position in Augusta, he applied and got the standard letter back thanking him for his interest and asking him to respond to what "boiled down to the medical equivalent of what are your thoughts on the universe," Dr. Eastwood said.

He took the request on as a sort of term-paper assignment which he never did complete.

Instead he got a call from Dr. Francis J. Tedesco asking him to come for an interview. He knew Dr. Tedesco from their common gastroenterology circles. They'd also run into each other at the Hospital of the University of Pennsylvania in 1969 and 1970 when Dr. Eastwood was finishing his residency and Dr. Tedesco was beginning his.

Sept. 25, 1989, this 6-foot-3-inch basketball-playing, back-packing, hill-climbing father of three who writes unpublished mystery stories featuring his youngest daughter, Kara, assumed his duties at MCG.

Faced with getting on a moving vehicle, the new dean rapidly immersed himself in talks with his chairmen to begin to understand the people and place for which he is responsible.

And as he talked of his job in early October—with just three weeks under his belt—he preferred to share broad views rather than focus on details.

"I think that at the core of how we look at what we are doing here at the medical school, we have to remember that there are 700 or so medical students who are here. If the medical students were not here, we would not be here. Or, if they were not here, we would have to have another reason to be here," he said.

"I think this university must emphasize the development of research and scholarly programs. That is all part of our mandate to further our knowledge.

"We have to recognize that many people here are doing superb research, many people here are doing superb teaching and clinical activity. They should be recognized for that.

"What I am really saying is that we tend to focus on one thing or the other. But medicine is not just research, not just teaching, not just patient care. It includes all these things and we have to tend to all of them."

He has detected an uneasiness among faculty by a perceived emphasis on research over other activi-

"There is no question that we are in an era of change at the Medical College of Georgia. But I am not so naive as to think that good clinicians, outstanding teachers and innovative scientists did not exist before I came here. In fact, among the reasons I came here was that I saw excellence in all these areas."

ties. Part of his job is to deal with that, to reassure the faculty that they are useful and have a vital function.

"There is sometimes a tendency when new people come into positions of responsibility that the attitude develops, everything needs to be improved. Nothing here is worthwhile. Now things will really change.

"There is no question that we are in an era of change at the Medical College of Georgia. But I am not so naive as to think that good clinicians, outstanding teachers and innovative scientists did not exist before I came here. In fact, among the reasons I came here was that I saw excellence in all these areas.

"On the other hand, here or anywhere else, we cannot tolerate inefficiency and lack of commitment."

His own innovative medical education fueled by his later interest in admissions and the medical education process make him interested in curriculum.

"I intend to examine the curriculum here. I think there is a lot of room in every medical school for self-examination of the curriculum and for change. We have the obligation as a center of medical learning to achieve a reputation as innovators in medical education. We are the experts. And, the public can expect that we will be innovative in medical education.

"The public is also looking to us, the academic medical centers in general and this institution in particular, for leadership in the critical area of health care delivery.

"We must be known as the place to which people from this community, this state, this region and beyond want to come to receive the best medical care," Dr. Eastwood said.

"We have to do things to make this medical center an attractive place where people will want to come here and work, go to school and be a patient. It's the three missions of academic medicine again from a slightly different perspective.

"If we have a center here that is doing first-rate research and innovative teaching, it also has to attract patients who will know that this is the place to go for outstanding medical care. That is the whole idea of an academic medical center. We are at the core, the center of development in any area that your imagination allows you." ■

Dr. Collins... *cont. from pg. 19*

early days of the State Medical Education Board program.

Collins became a freshman at the Medical College of Georgia.

"(Medicine) combined a way to apply your love of science and knowledge. But also, I've always had a strong humanity side. I would not be real happy doing research in a laboratory. I had to take the science and put it to work in people, and that's where medicine shines."

He made another important connection in 1959 when he married his wife and partner, Jan.

"Medicine is a partnership between the physician and his spouse which often begins in medical school where it requires the efforts of both to achieve this one goal," Dr. Collins said.

His wife taught English and speech at Richmond Academy while he worked as a student.

They would go on to a general internship at Floyd County Hospital in Rome, Ga., before military duty called and Dr. Collins pulled a two-year stint at the U.S. Air Force Hospital in Winter Park, Fla.

He remembers vividly the first time he had to salute the colonel. He walked into the colonel's office to give the courtesy. "He looked up and said, 'Where did you go to medical school?' I said, 'Medical College of Georgia, sir.' He said, 'I've heard people that graduate from the Medical College of Georgia don't know s_ _ _. Is that true?' Well, I mean, first of all I'd never been in a military environment and here he comes at me with both barrels. I was taken a little aback. I said, 'Sir, I don't know exactly how to respond. Is there anybody you want me to compare to? I'll be glad to debate. Put me up against any of your Harvards or Yalies, if that's what you have in mind.' He said, 'That's the spirit.' He leaned across the desk, shook my hand and said, 'Lewis Oden, class of '32.'"

Dr. Oden gave Dr. Collins the golden opportunity to use the next two years to his advantage, telling him to put together the rotations he'd like in an effort to find an area of specialization.

His military experience leaned him toward surgery.

Dr. Wood Lovell caused him to fall for orthopedic surgery.

Dr. Lovell was chief of the orthopedic surgery training program at Georgia Baptist Hospital. Dr. Collins still finds it hard to describe the impact Dr. Lovell had in their initial meeting. But there was something about his presence. Dr. Collins went home that day and told his wife, Jan, that he'd met someone he wanted to pattern his life after.

By 1969, Dr. Collins had completed his orthopedic training at Georgia Baptist, then opted for a one-year fellowship in hand surgery at Duke University Medical Center.

He returned to his wife's hometown of Atlanta for his practice.

"For me, it has been a beautiful thing, because I have enjoyed every day of it," Dr. Collins said of his career.

These days find him looking ahead and looking back, to remember where that career began.

Several friends and fellow alums had urged Dr. Collins to take on the helm of the MCG School of Medicine Alumni Association.

"(MCG) gave to me when I needed it. So it's my duty to give to it when I can be of benefit," Dr. Collins said.

He wants alumni chairmen in every state where at least 10 alumni live. He wants to expand on the new effort by alums to become involved with today's students "so they will begin to feel like alumni."

Pointing to the emotional and financial support his own wife has given, he also is encouraging spouses of alumni to get involved in the activities of the School of Medicine Alumni Association.

He intends to spend his year in office reminding all alums why they should reach out to their alma mater.

"You must look at it as a pay-back mechanism. Your education was something which you paid very little for," Dr. Collins said. "If you just multiply that out to a very low percentage interest rate, you owe a good deal."

He calls an education at MCG a bargain.

"Let's put it this way. I have been in competition with people from (graduation) on who attended everywhere in the world and I've never felt inadequate," he said.

But it's unrealistic to believe that MCG can continue to thrive on state support alone, he said.

"What we want to do is provide things that will make it above the average. It is going to be my job this year to try to open up avenues for our alumni to participate in the drive to make our medical college one of the premier institutions of its kind in the world," he said.

It's a job that's "going to take time, energy and money." ■

Neurosurgery Pioneer Dies

Dr. Augustus McCravey, a neurosurgery pioneer and 1934 graduate of the University of Georgia School of

Medicine (now the Medical College of Georgia) died Sept. 15. He was 79.

A native of Whitestone, Ga., Dr. McCravey earned a pre-medical degree from the University of Georgia. After medical school, he completed a five-year residency at Temple University Hospital in Philadelphia in neurological surgery. He was awarded a master's degree in neurosurgery.

In 1940, he moved to Chattanooga, Tenn., and became the first physician to establish a neurosurgery practice in the city. He was one of the first 100 U.S. physicians to be certified as a neurosurgeon. Shortly after establishing his practice, he joined the U.S. Army as its first neurosurgeon. After five years of active duty in World War II, he returned to Chattanooga.

He retired from practice in 1975 but continued to teach at Erlanger Medical Center as clinical associate professor of neurosurgery.

He was a former chief of staff of Memorial Hospital in Chattanooga and founder of the Orange Grove Center for the mentally handicapped. He also helped establish Chattanooga's first school for children with cerebral palsy. He and Dr. Temple Fay of Temple University were the original researchers of hypothermia.

Survivors include his wife, Helen, two children and four grandchildren. ■

Alumni Association Thriving

Tammy Berry

The organization, management and funding of the Medical College of Georgia School of Medicine Alumni Association ranks similarly to other medical schools in the nation, according to the results of a recent survey conducted by the University of California at Los Angeles School of Medicine.

The survey was sent to 127 American medical schools to gather information about how medical alumni associations are organized, managed and funded. Ninety-two schools responded.

MCG's School of Medicine Alumni Association is in line with—and, in some cases, superior to—other American medical alumni associations as evidenced by the findings of the survey.

The association's dues program, which has annual dues of $50, is above average. As of Oct. 15, 1989, the association's income was $62,480 from 1,253 members. According to the survey, the average annual dues reported were $50 with an average income of $52,158 from 1,132 members.

MCG is similar to other U.S. medical schools in that it conducts an annual fund, has a graduating class of at least 129 and has a board of directors. Most schools' alumni associations, including MCG's, offer a basic menu of services—alumni records, class reunions and alumni weekend activities.

Relatively new to the association is Homecoming weekend, which has been in existence for 15 years. Most medical associations' alumni weekend programs are new, having begun within the past 20 years.

Half of the responding associations reported responsibility for publishing a newsletter or magazine an average of three times a year. MCG publishes *Medical College of Georgia Today,* a quarterly magazine highlighting people and events at MCG. Alumni newsletters are incorporated into each edition of the magazine. Every five years, an alumni directory is published at MCG; 72 percent of the responding associations publish a directory every other year. Almost all of the respondents, including MCG, send their publications to all alumni without regard to dues-paying status. ■

Dr. E. Mansell Pattison

Dr. Pattison Dies

Dr. E. Mansell Pattison, professor and chairman emeritus of the Medical College of Georgia Department of Psychiatry and Health Behavior, died Sept. 9 at his residence.

Dr. Pattison died from the long-term effects of injuries sustained in an automobile accident Oct. 7, 1987. He was a patient at MCG Hospital and Clinics for approximately two months after his injury. Except for a few brief hospitalizations, he had been at his home since.

He retired on disability from his chairmanship July 15, 1988, and was given chairman emeritus status Oct. 15, 1988.

Survivors include his wife, Myrna, and three children.

Class Notes

Arthur C. Fleischer, M.D. (1976), Nashville, Tenn., a radiologist at the Vanderbilt University Medical Center, was elected a fellow in the American College of Radiology and has published "Diagnostic Sonography."

Charles R. Stafford, M.D. (1976), Gainesville, Ga., is chief of the Department of Obstetrics/Gynecology at the Northeast Georgia Medical Center in Gainesville. His first child, a son, was born Oct. 25, 1989.

Thomas Lane Estes, M.D. (1978), Moultrie, Ga., is chief of staff of the Colquitt Regional Medical Center.

James (Bert) H. West (1986), Alpharetta, Ga., joined his father in practicing internal medicine in July 1989. He has two children: Brittany, 3, and Justin, 9 months.

Navy Lt. David N. Carter, M.D. (1987), recently reported for duty aboard the aircraft carrier USS Saratoga, homeported in Mayport, Fla.

J. Ronald Stephens, M.D., Atlanta, chief of surgery at Crawford Long Hospital of Emory University, was appointed to the board of governors of the North American Boxing Federation in June. ■

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Nursing

Dr. Alma Y. Dixon

Knowledge Called A Lifelong Pursuit

Stephanie Neal

Nurses must have a lifetime commitment to learning, Dr. Alma Y. Dixon told students and faculty from the Medical College of Georgia School of Nursing during the school's Oct. 13 fall convocation.

"There's no way at all to keep abreast without it," said Dr. Dixon, director of consultation for the National League for Nursing in New York.

"Pursue it through education, pursue it through seminars, pursue it through reading and pursue it through study groups," she said. "Choose how you want to learn and respond in the way that's best for you."

Choosing the path for advanced learning isn't easy because there always are obstacles, Dr. Dixon said.

"For example, finances. Money often is a major barrier to pursuing an educational degree," she said. But loans, scholarships, fellowships and part-time arrangements offer ways to overcome that barrier, Dr. Dixon said.

During her description of a path she called "This way to a dream," Dr. Dixon described other obstacles that can hinder chances for advanced education.

She discussed the importance of a student's good attitude, always giving it "the best shot." And she discussed the role the attitude of the majority can play in a minority student's education.

Dr. Dixon defined minority students in nursing as black, hispanic, Asian, North American Indian and men. She also noted that more older adults are enrolling in nursing schools.

"These students often are thought of as in need of remedial work. And that may be true, because sometimes their prior educational experience did not prepare them.

"But they sometimes are called 'poor-quality students.' Drop the 'poor quality.' They are just students in need of a little more help," Dr. Dixon said. Minority students also sometimes are at a disadvantage because they have fewer role models and often are the first from their families to obtain higher education.

"The majority, no matter how well-intentioned, always speaks a different language," Dr. Dixon said. "But maybe that's not bad. Because the way we respect our differences, the way we listen to each other and the way we work toward our goals I really believe to be reflective of our ability to care for patients."

Nursing education should respond to the differences of the minorities, and also should build links between nurses with associate, bachelor's, master's and doctoral degrees, Dr. Dixon said.

"We need a system that recognizes that the face of nursing is changing," she said.

Dr. Dixon is head of a consultation network that collects sources of information concerning nursing education, practice, testing and evaluation and research, according to Dr. Linda A. Ellis, associate dean for graduate programs at the MCG School of Nursing. Schools of nursing and other health care agencies can use the network as one source for a variety of information, Dr. Ellis said.

Dr. Dixon also designed and implemented Project LINC (Ladders in Nursing Careers), designed to increase the supply of registered nurses by offering educational advancement opportunities to licensed practical nurses and nursing attendants already employed in 43 hospitals and long-term facilities.

Dr. Dixon has a doctoral degree from Teachers College, Columbia University; a master's degree in community health education from Hunter College, City University of New York; a bachelor's degree in psychology from Fordham University; and a nursing diploma from Lenox Hill Hospital School of Nursing.

Dr. Dixon also received an Ethnic-Racial Minority Fellowship for Future Nurse Researchers from the American Nurses Association. ■

Dr. Bennett's Work Aids Homeless Research

Stephanie Neal

An associate professor in the Department of Mental Health-Psychiatric Nursing at the Medical College of Georgia School of Nursing spent three months working with a branch of the National Institute of Alcohol Abuse and Alcoholism in Rockville, Md.

Dr. E. Gerald Bennett took a leave of absence from his MCG position during the fall quarter to work as a consultant to the Homeless Demonstration and Evaluation Branch of the NIAAA. He returned to the School of Nursing in the winter.

During his three months in Maryland, Dr. Bennett offered his technical assistance to grant applicants who are developing research projects that evaluate innovative interventions for homeless people with alcohol and other drug problems. About $9 million will be available to support that type of new research during fiscal year 1990, Dr. Bennett said. NIAAA currently supports nine such projects in seven states.

"I think it is important that this gives MCG an opportunity to be involved, to share experience in a national effort to work toward solutions of the homeless situation," Dr. Bennett said.

As a nurse educator, Dr. Bennett has been involved in incorporating the study of alcohol and drug abuse in nursing curricula so nurses are adequately prepared to deal with clients who present those problems. He served on a national NIAAA panel that drafted a statement concerning the essential alcohol and drug abuse content that should be in basic nursing education programs.

Because alcohol and drug abuse sometimes is a factor in homelessness, Dr. Bennett became involved in a 1986 study of the homeless population in Augusta. Earlier this year, Dr. Bennett and another MCG researcher, Dr. Shirley A. George, conducted a study of Augusta's homeless for a report presented to the city's mayor. That report showed that a substantial amount of the homeless population had undergone treatment in substance abuse units or other psychiatric settings.

Dr. Bennett received his bachelor's degree in nursing from MCG, his master's degree from Case Western Reserve University in Cleveland and his doctorate from the University of Texas at Austin. ■

Alum Makes Mark in Transplantation

Christine Hurley Deriso

Jennie Perryman has traveled a long road—literally and figuratively—in her quest for a nursing career. But she reflects on the journey with pride and satisfaction. After all, she reached her destination and enjoyed the scenery along the way.

Ms. Perryman, who earned a master's degree from the Medical College of Georgia School of Nursing in 1978, was named director of Emory University Hospital's Center for Transplantation when it was created in September 1988.

She set her sights on the field of transplantation as soon as she began nursing school at Atlanta's Grady Memorial Hospital in 1970.

"I wanted to be in the newest, most exciting nursing field as I saw it," she said. "That field was renal transplantation." The California native earned her degree, then worked in the renal-intensive care unit at Grady while taking the next step toward her goal: earning a sociology degree from Georgia State University.

"I wanted more background in working with the chronically ill," she said. "Chronic illness has so many psychosocial aspects to deal with." The sociology degree helped equip her for the task. After graduation in 1974, she went on maternity leave, then worked at Northside Dialysis Center in Atlanta. The patients she dealt with - those who relied on a machine to compensate for their failed kidneys - were the beneficiaries of her education and experience.

"You empathize, you educate and you teach," she said. "There's a lot of patient teaching involved. (The patient) has to learn to manage his illness for the rest of his life."

But as much as she enjoyed working with patients, Ms. Perryman knew she still had farther to go. "My master's was the next step in my career pattern," she said. "I chose MCG because I was impressed with the program and it met my needs."

Unfortunately, MCG was some 150 miles down the road, and Ms. Perryman, who had a husband and 5-year-old son at home, was in no position to uproot. But she didn't let that stop her.

"I commuted to MCG with my son," she said. "I lived there during the week and came home on the weekend. My husband knew I was driven to get my master's, so we worked it out. It was a challenge. I don't know where I got the energy. I would not—could not—do it again."

She earned her master's degree in adult health nursing then went into private practice with a nephrologist. In 1982, she joined Emory, a regional transplant center, as a clinical specialist and has been there ever since. She said the transplantation center was a natural evolutionary process.

"We thought, 'We've got a lot of neat ideas in this (transplantation) program. Somehow, we've got to match them.'" As director, Ms. Perryman collaborates with the hospital's administration, transplant program medical directors, transplant coordinators, clinical nurse specialists and other related departments to share resources and information.

"I've moved from microcosm to macrocosm. It's very challenging and rewarding." And every day is different, she said. "I'm not sure I can say I have a typical day. On any given day, I might work with accounting, or social workers, or transplant coordinators".

Currently, Ms. Perryman is developing a centralized database which all hospital staff involved in transplants can share. She's also working to address the economic issues involved in transplantation. "The treatment doesn't stop or start with the transplant," she said. "The financial issues stay with a patient for life."

Although some support staff for Ms. Perryman will be on board soon, she now has all the work to herself. She also stays busy at home; as her career has grown, so has her family. She has a 16-year-old son, 11-year-old daughter and 11-year-old stepson.

"My daughter just made cheerleading, so I have to be sure to make time for her basketball games," she said. But her children take her career in stride. "They've always known a working mom. They accept it."

They've also probably learned from it, having witnessed firsthand the technique of setting a goal and systematically attaining it. But as happy as Ms. Perryman is with her career, she hasn't stopped setting goals. "Once there's achievement, it's time to look beyond," she said. ■

Faculty, Students Present Research

Several faculty and students from the Medical College of Georgia School of Nursing made presentations at the American Nurses' Association 1989 Nursing Research Conference.

Also at the conference, held Sept. 27-30 in Chicago, an MCG nursing researcher received the 1989 Outstanding New Investigator Award from the Council of Nurse Researchers of the ANA.

Dr. Lore K. Wright, an assistant professor in the Department of Mental Health-Psychiatric Nursing in the MCG School of Nursing and in the Department of Psychiatry and Health Behavior in the MCG School of Medicine, presented her paper, "The Marital Relationship in the Presence of Alzheimer's Disease," and accepted the award during the national research conference.

The MCG School of Nursing also hosted a reception at the convention in honor of Dr. Wright.

Other presentations made by MCG faculty and students at the conference were "The Expression of Anger and Depression in Women over 60 Years of Age," Dr. Sarah H. Gueldner, associate professor in the Department of Adult Nursing; "A Phenomenological Study of Creativity in Older Adults: A Pilot Study," Martha H. Bramlett, nursing doctoral student at MCG; and "Stress and High-Risk Pregnancy," Dr. Virginia H. Kemp, director of the MCG Center for Nursing Research.

Poster presentations made at the conference were "Humor and Its Relationship to Perceived Health, Life Satisfaction and Morale in Older Adults," Dr. Jolene M. Simôn, assistant professor in the Department of Adult Nursing; "Effectiveness of a Pain Management Program for Pediatric Oncology Patients," Dr. Patricia Lillis, associate professor of Adult Nursing; "A Description of Caring Experiences Among Faculty-Student DYADS," or pairs, Dr. Gloria M. Clayton, professor in the Department of Adult Nursing; and "The Lived Experience of Coping with HIV-Disease," Dr. Nancy L. McCain, associate professor in the Department of Adult Nursing and acting chair of the Department of Mental Health-Psychiatric Nursing and Lou F. Gramling, nursing doctoral student at MCG. ■

Two Search Committees Appointed

Search committees have been appointed to find new chairmen of the departments of adult nursing and mental health-psychiatric nursing in the Medical College of Georgia School of Nursing. The committees were appointed by Dr. Mary

E. Conway, dean of the school. In mental health-psychiatric nursing, a committee is looking for a replacement for Dr. E. Gerald Bennett, an associate professor in the department, who resigned as chairman to devote more time to research.

Dr. Nancy L. McCain, an associate professor in the Department of Adult Nursing, is acting chairwoman of the department.

The mental health-psychiatric search committee is chaired by Dr. Maureen R. Killeen, associate professor in the department who is located on the Athens campus of the nursing school.

Other committee members are Dr. Patricia Lillis, associate professor of adult nursing; Dr. Nancy Lovejoy, associate professor of of adult nursing; Dr. Russell Swansburg, professor of nursing administration; Dr. Cecilia Tiller, assistant professor of parent-child nursing; Dr. Lore Wright, assistant professor of mental health-psychiatric nursing; and Dr. Sandra Tucker, assistant professor of community nursing.

In adult nursing, a committee is looking for a replacement for chairwoman Dr. Shirley Davis-Martin, who will leave MCG in January.

Sharon Butler, an assistant professor of adult nursing, is chairing that committee.

Other members of that search committee are Carolyn Wheale, instructor in mental health-psychiatric nursing; Dare Domico, assistant professor of adult nursing, Athens campus; Dr. Sarah Gueldner, associate professor of adult nursing, Athens campus; Dr. McCain; Dr. Elizabeth Pond, assistant professor of parent-child nursing; Linda Streit, assistant professor of adult nursing, Athens campus; and David Bass, assistant dean for business affairs. ■

Alum Awarded $300 Grant

Johnny A. Stanfield, a research nurse at the Medical College of Georgia Hospital and Clinics, has been awarded a $300 grant to research the role of the staff nurse in clinical drug trials.

The grant was awarded by the Beta Omicron chapter of Sigma Theta Tau Inc., the international honor society of nursing.

Mr. Stanfield is a 1980 graduate of the Medical College of Georgia School of Nursing. ■

Class Notes

Robert J. Reeves (1984), Columbia, S.C., graduated from the University of South Carolina School of Law in 1989 and was admitted to practice law in South Carolina in Nov. 1989. ■

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Thirteen nursing students visited Brighton, England last spring as part of an elective course. Above, some of the participants reminisce about the experience.

Dr. Osborne... *cont. from pg. 11*

sity corporate development programs.

"Dr. Osborne is a broadly experienced university administrator and development professional with 18 years of his 23 years having been in higher education," said Dr. Francis J. Tedesco, president of MCG.

"I am looking forward to working with Dr. Osborne as he assumes the overall responsibility for the development, planning, implementation and coordination of all fund-raising activities and constituent relations for MCG," Dr. Tedesco said.

"These activities will take on increasing importance as we position ourselves for the next decade and beyond," he said. ■

Homecoming... *cont. from pg. 11*

Allied Health Sciences

An alumni association breakfast/annual meeting will be held May 4 at 8 a.m. in the MCG Alumni Center. The Distinguished Alumnus Award will be presented at this time. A physical therapy reunion for the classes of 1975, 1980 and 1985 will be held May 4 on the Princess Augusta Riverboat. The boat will be boarded at 6:30 p.m.

Other department plans will be announced soon.

Dentistry

Reunions for the classes of 1980 and 1985 will be held May 4 at 7 p.m. at the Clarion Telfair Inns. A reunion for the class of 1975 will be held May 5 at 7 p.m. at the Cotton Row Cafe. More Homecoming news is included in an article in the School of Dentistry section of the newsletter (see "2 Continuing Education Programs Offered.")

Graduate Studies

Graduate faculty and alumni are invited to an alumni association luncheon May 3 at noon in the Eugene E. Murphey Pathology Building conference room. The Distinguished Alumnus Award Presentation and Lecture will be held May 3 at 2 p.m. in room 108 of the Robert B. Greenblatt, M.D. Library. Graduate faculty, alumni and students are invited.

A Graduate Studies Homecoming reception for graduate faculty, alumni and students will be held May 4 at the home of Dr. Lowell Greenbaum, dean of the school. The time will be announced later.

Medicine

A primary-care and family-practice symposium will be held April 30 through May 5. Contact the Division of Continuing Education at (404) 721-3967 for more details.

A dean's reception will be held May 4 from 2-4 p.m. in the Eugene E. Murphey Pathology Building conference room. An alumni banquet will be held that evening at 7 p.m. in the Bon Air building at 837 Hickman Road. The distinguished alumnus award will be presented at this time, along with installation of the new president of the alumni association.

The following reunions will be held May 5 at 7 p.m.:

Class of 1940(location to be announced)class of 1945 (location to be announced); class of 1950 at the Pinnacle Club; class of 1955 at the Pinnacle Club; class of 1960 on the Princess Augusta Riverboat; class of 1965 at Sixth at Watkins Restaurant; class of 1970 at the Augusta Landmark Hotel; class of 1975 at the Partridge Inn; class of 1980 at the MCG Alumni Center; and class of 1985 at the Augusta Landmark Hotel.

A dinner for alumni who are not having a reunion will be held May 5 at 7 p.m. at Sixth and Watkins Restaurant. An Emeritus Club luncheon, open to alumni, residents and interns who graduated 40 or more years ago from MCG, will be held May 6 at 11:30 a.m. in the MCG Alumni Center. Retired faculty who are members of the alumni association also are invited.

The following hotels will offer alumni special rates during Homecoming weekend. The Alumni Activities office has established room blocks at these hotels for Homecoming. Reservations are first come, first served.

Courtyard Marriott, 800-321-2211

Perrin Guest House Inn, 404-736-3737

Clarion Telfair Inns, 404-724-3315

Bradbury Suites Hotel, 404-733-4656

Radisson Inn, 800-654-7452

Holiday Inn West, 400-738-8811

Shoney's Inn, 404-736-2595
Partridge Inn, 800-476-6888

Augusta Landmark Hotel, 404-722-5541

For additional Homecoming information, contact Tammy Berry at 721-4416 or 721-4699 (local), 800-721-6813 (toll-free in-state) or 800-869-1113 (toll-free out-of-state.) ■

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Photography Phil Jones

Deadline for submitting information for publication in the spring issue of Alumnews is Feb. 9, 1990.

Alumni! Let us know what's new with you by taking a moment to fill out this form. Also, please send us your curriculum vitae so we can keep your files up-to-date.

Today's date _____

Name _____

Phone _____

School graduated from _____

Degree _____ Class year _____

Street address _____

City _____ State _____ Zip _____

❑ Check if new address

Present specialty and place of practice or training _____

Professional news _____

Personal news (b&w photos welcome) _____

Please send to : Christine Deriso; Alumni Center FI-100; Medical College of Georgia; Augusta, GA 30912

Side BY Side

Independently each has its place in the sun.

Side by side they are awesome.

"My philosophy is simple," said Dr. Lowell Greenbaum, vice president for research at the Medical College of Georgia.

"The competition is so keen, if you are thinking about extramural support or even industrial support, you no longer have the luxury of saying, 'We have it all and we can go out and do it all.' The problems are too large and the competition is too great.

"But if you can bring in expertise in a variety of different areas, then you can compete."

So MCG, Georgia State University, the Georgia Institute of Technology and the University of Georgia have formed a united front that can promise and deliver.

"Most states have put additional pressures on their research institutions to upgrade their research which they feel, because of technology transfer, would enhance the economic growth of the state," Dr. Greenbaum said.

Obviously research dollars available from federal and other sources are limited. In fact, no specific dollar amount of the federal budget is designated for research, the vice president said. And growth of research dollars is rather limited, at about 3 percent to 4 percent each year.

"You have to be better than the next person at all times in order to maintain your funding," Dr. Greenbaum said.

MCG and like institutions have learned that getting funding in the first place is not the end of the competitive line.

"The most difficult time to get funds is . . . six to nine years into your research program when you reapply for your funding. That is when you find that the competition is so keen that we begin to slip and slide in terms of retaining our funding."

The very fact that MCG, Georgia Tech, the University of Georgia and Georgia State University don't have much overlapping expertise is a real plus, said Dr. Joe L. Key, vice president for research at the University of Georgia.

Advantages exist from simply getting to know each other and what each institution is doing in order to establish a knowledge base, he said. "We need to interact on problems that cut across disciplinary lines. The regents, the governor and the state expect us to do it. I think we can certainly see potential benefits from that," Dr. Key said. "We are very complementary of each other," said Dr. Cleon Arrington, vice president

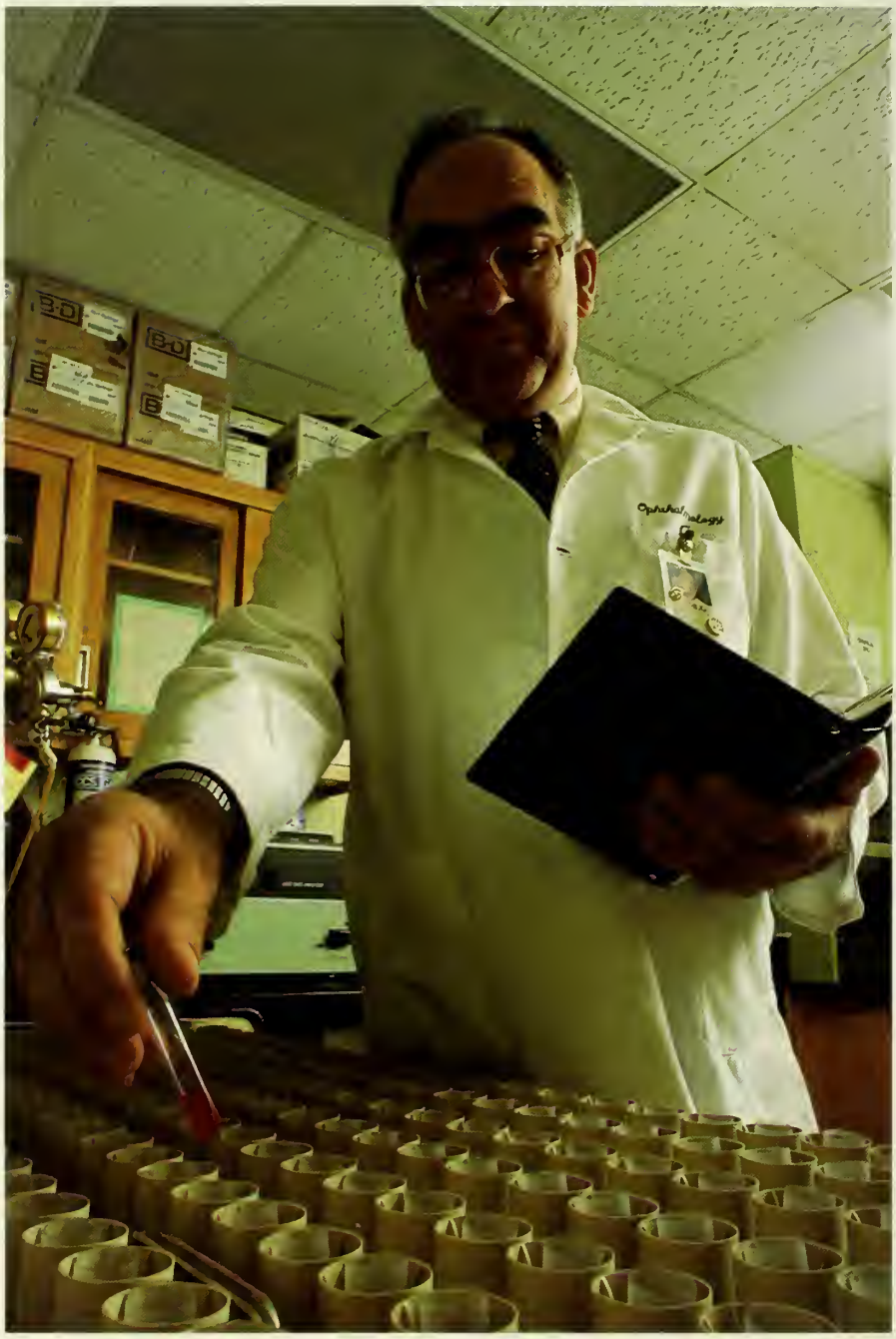
Dr Lowell Greenbaum in laboratory with graduate student Xiaoxing Gao.

for research at Georgia State University. "As a complement, the two or three together exceed any one of us as individuals," said Dr. Arrington, whose school's expertise includes design and synthesis of large, biologically active molecules.

Georgia Tech is a strong technical university with the third-largest engineering research program in the United States and expertise ranging from digital systems to missile guidance and design, said Dr. Thomas Stelson, executive vice president. "But we don't have a medical college and never intend to," he said, noting that collaborative work on medical and technical efforts is highly beneficial and important.

The four vice presidents of the university-level institutions began meeting informally after the position of vice president for research was created at MCG in 1984.

"Within a short time after we began to informally meet, the chancellor called all of the vice presidents for research and asked them to develop a concept of research resources in the Georgia university system so that he could go to the legislature and point out that with these resources, we could aid in the (state's) economic and research growth," Dr. Greenbaum said.



Dr. Keith Green, Regents professor of opthalmology at the Medical College of Georgia, is collaborating with researchers from sister institutions in his vision research. He is working with the University of Georgia regarding drug research and the Georgia Institute of Technology regarding glaucoma research.

These informal meetings and the chancellor's subsequent request led to the University System of Georgia Chancellor's Special Funding Initiative. This program provides dollars to universities to upgrade research capacity in given areas and to generally improve the schools' instructional capacity.

"We proved to the legislature that if they funded certain areas in the university system, we could compete better and multiply the funding," the MCG vice president said.

The chancellor feels so strongly about cooperative research efforts that a key element in competing for the special initiative funding is working with a sister institution, Dr. Greenbaum said.

"It has worked so well that now the chancellor has formally requested that the vice presidents for research meet quarterly to aid him and his staff in concepts of research, in programs of research and in updating and reporting on research and communicating throughout the state and the country what we are doing," Dr. Greenbaum said.

The annual Georgia University Research Symposium has been established to promote effective cross-fertilization. A topic, such as memory and disease, will be selected and specialists from all four universities and outside experts will make presentations. The first meeting likely will be held in the fall and probably will be held at MCG, Dr. Greenbaum said.

He noted that Georgia Southern College, which has been slated to join the university ranks in July 1990, definitely will be incorporated into this growing network of varying expertise.

The pooling of fiscal, mental and physical resources at Georgia's universities is in the embryonic stage with about 10 joint projects under way in any given year, Dr. Greenbaum said. "But the potential is enormous." ■

—Toni Baker

New Ammunition Against Deadly Diseases

The Medical College of Georgia has paired its unique approach to designing drugs with the University of Georgia's ability to synthesize drugs to wage war on cancer and AIDS.

The idea is to modify existing drugs to make them better—more effective and less toxic—as well as to design new drugs, said Dr. Lawrence B. Hendry, associate professor in the MCG Department of Physiology and Endocrinology.

Dr. Hendry teamed up with Dr. Chung K. Chu, associate professor of medicinal chemistry in the University of Georgia's College of Pharmacy, in September 1988.

"We have been able to design a number of compounds using MCG technology," Dr. Hendry said. "They have been designed and tested and at least one looks promising in the anti-cancer area."

At MCG, doctors are using space-filling models of DNA, the basic structure of all genes, to look at the way varying molecules fit into that DNA structure.

Dr. Hendry then produces computer-generated models that give him quantitative information about how well the compounds fit into the DNA.

"In most cases we are looking to develop a structure which is what we call complementary to DNA," Dr. Hendry said. The DNA is the mold and the compounds are designed to fit into the DNA mold.

More traditionally, new drugs or compounds are made by trying permutations and combinations of thousands of compounds isolated from plants, animals or existing synthetic products. "Some of it is by serendipity," Dr. Hendry said.

"For us, this is where a new and better drug begins," he said of the space-filling models and computer technology.

Once he has his computer model, Dr. Hendry sends it to Dr. Chu who synthesizes or constructs the compound from scratch. Dr. Chu then sends it back to Dr. Hendry for testing in cell culture. "We complement each other," Dr. Chu said.

Despite the uniqueness of their approach, Dr. Hendry says the idea is a simple one.

To make a natural compound, a gene must be responsible for its production. Normally, DNA is transcribed into RNA which is then translated into a protein, such as an enzyme, that makes the compound. "Somehow the DNA knows precisely what it's making," Dr. Hendry said.

"We are the only ones doing it this way, literally predicting the biological activity and structures of molecules from DNA."

As an example, breast cancer can be treated with compounds that counteract the effects of estrogen, a female hormone, he said. "We know that estrogen itself fits into certain places in the gene.

"By knowing where the estrogen fits, we can also build molecules that fit at the same site the estrogen fits into. By doing that, we can build anti-estrogens, things that will compete with estrogens for fitting into the site," Dr. Hendry explained.

By definition, those anti-estrogens should impact breast cancer.

The scientists can't be positive that the compounds created through the space-filling and computer models will fit exactly the same way and respond in the same way in the living cell.

But the models are certainly reasonable predictors, Dr. Hendry said.

He has used this technology to modify and improve known compounds as well as to produce totally new ones.

In the AIDS arena, doctors are trying to block the action of an enzyme called reverse transcriptase, which takes information from a virus and transcribes it back into the gene so the gene can replicate the virus.

Blocking transmission of viral information to the gene prevents replication of the virus.

"Viruses don't reproduce on their own. They are not living organisms in the classical sense. They require a host cell," Dr. Hendry said.

"One approach we are trying is to design agents that fit into the DNA that might prevent the transcriptase enzyme from interacting with the gene."

The compounds they are examining could have a palliative or preventive effect.

He says the work with viruses is still primitive primarily because so little is known about viruses in general as well as how to prevent viral infection . . . remember the common cold.

Cancer cells are a different story. "It has been well established by other scientists that a lot of compounds will get into cancer cells and actually bind to the DNA and kill the cell," Dr. Hendry said. These are classic chemotherapeutic agents.

But there are problems. These drugs can be toxic and are not always selective about the cells they kill. "One idea would be to make them more selective for the target tissue and less toxic in general," Dr. Hendry said.

"What we have done is develop about a dozen analogues to be synthesized, one of which looks like it's promising in terms of affecting a variety of cancer cells," he said.

This compound shows—at least in cell culture—some activity against several cancers. ■

—Toni Baker

L STREET JOU

Academia + Business = Success

It's called "technology transfer"—taking research find ings from a university and transferring the information to a private industry for commercial use.

Both the university and the business benefit. The business has a new product and the profits that go with it. The university gets better research funding, meaning more research and better faculty salaries.

Technology transfer is in the embryonic stages at the Medical College of Georgia but growing rapidly, according to Dr. Lowell M. Greenbaum, vice president for research at the Medical College of Georgia.

For example, MCG is one of 10 universities in a consortium working on a research agreement with the Savannah River Site. A liberal patent and copyright policy is in place to encourage faculty and students to disclose their discoveries.

Also, top researchers from MCG present their work to entrepreneurs at an annual meeting in Atlanta. And MCG is involved with groups that encourage technology transfer, such as the Advanced Technology Development Center and the Technology Development Association Network.

All of those things are important because MCG as a state research university has a new responsibility—recently handed down from the governor, to the chancellor to all university presidents—to aid in the economic development of the state and region, Dr. Greenbaum said.

That's an awesome responsibility that pushes the university to find more research sponsors. But that also has a downside, he said.

"There's an intense debate within the academic community and with traditional sponsors of research, such as the National Institutes of Health, as to what constitutes a conflict of interest," he said. "Are we working toward academic or industrial activity?"

That issue will be difficult to solve but a balance must be found as the university works to secure more extramural research funds and fulfill its new obligations to the state, Dr. Greenbaum said.

Other universities, such as Johns Hopkins and Washington University at St. Louis, have managed to achieve that delicate balance with success by working through the same type of programs now in place at MCG, he said.

For example, the Georgia-South Carolina Association Consortium of Universities is working to draft a contract with the Westinghouse Savannah River Co. and the 10 schools to investigate the areas of safety and waste management at the nuclear weapons plant in Aiken, S.C.

"From the MCG point of view, and from the point of view of the other two medical schools in the consortium (Emory University in Atlanta and the Medical University of South Carolina in Charleston, S.C.) we are interested in researching radiobiology, such as the long-term effects of radiation as it pertains to cancer and aging.

"We would not be involved in monitoring SRS or anything that goes on there, but we do feel this brings to SRS—and the region and the nation—very unique expertise that these 10 schools have as a unit.

"My feelings about this are that MCG is the closest unit, only 18 miles from the site, and we need to be involved in both benchwork and epidemiological population studies. I think we have an obligation to the region and country to lend our expertise to research, because nuclear energy is not going to disappear," Dr. Greenbaum said.

Another program already in place also works toward increasing technology transfer—MCG's patent and copyright policies, approved by the University System of Georgia Board of Regents.

The cost of a patent is between $5,000 and $6,000, according to Dr. David Pashley, professor of oral biology in the MCG School of Dentistry and chairman of the university's patent and copyright committee.

But MCG will help with the patenting process. The committee,

comprised of faculty, advises the vice president for research on faculty research and recommends how royalties or licensing fees should be divided.

"Most things can simply be copyrighted at the bottom of the title page, but 90 percent of what is copyrighted is never marketed," he said. "But patents are different because they require a lot more assistance by the university, using a lab, lab technicians, lab space, chemicals, lighting and heating."

If the work being copyrighted was a task assigned at MCG, the typical breakdown usually is 80:20, with the majority going to the researcher, Dr. Pashley said. If the work is MCG-assisted, using computers or other MCG supplies, the breakdown usually is about 90:10. Fees generated from patented inventions are usually divided equally among MCG and the inventor, with MCG receiving no less than 50 percent of the royalties.

"At other institutions, it's not that high," Dr. Pashley said.

The patent committee also works to determine if the development already has been patented.

If the university decides not to pursue the patent, all rights in the invention revert to the inventor upon request. Often, an industry will pay for the costs of patenting a product in return for the first look at the product.

But some things are best not patented. Developments such as monoclonal antibodies can be altered slightly in molecular biology to get around patents.

That's when a trade secret is best, Dr. Pashley said. "With a trade secret, you say 'I will make this for you and I will sell it to you' but you don't tell them how you made it."

Beyond patenting and copyrighting, MCG also is working to encourage technology transfer by participating in other groups.

The statewide Advanced Technology Development Center, funded by the state legislature, will help set up small centers or find companies to market products patented at universities.

'That's good because it demonstrates to industry that we are a source for industrial development and economic growth," Dr. Greenbaum said. "This promotes industrial-supported research programs and also attracts entrepreneurial industry to the Central Savannah River Area."

Another major development group is the Technology Development Association Network, Dr. Greenbaum said. The Atlanta-based group comprised of bankers, industrialists and university heads works similarly to the ATDC, although it works solely to attract industry to the state through the resources and inventions of the universities.

And then there's the annual Biotrek meeting in Atlanta, where last year five MCG researchers shared their work with business people and entrepreneurs.

All of this exposure is important to MCG as it focuses on its new responsibilities to the state, Dr. Greenbaum said. Especially as that responsibility turns southward, he said.

"One of the things we are seeking in addition to helping and supporting economic growth in our local region and in the Atlanta area is to help and support economic growth in south Georgia.

"We straddle Atlanta and south Georgia, and we feel we could be a great help to them," Dr. Greenbaum said. ■

—Stephanie Neal

Pashley's Potion

An unusual poster about a new dental product is posted in a prominent position on a bulletin board outside the Oral Biology-Physiology offices in the Carl T. Sanders Research and Education Building on the Medical College of Georgia campus.

The poster promotes Protect, marketed by the John O. Butler Co. of Chicago, a product dentists can apply to patients' teeth to decrease painful sensitivity.

What is unusual about the poster is that across the top—in addition to its glossy, color typeface—is a line handwritten with a black marker.

It reads "Pashley's Potion."

That's a reference to Dr. David Pashley, professor of oral biology in the MCG School of Dentistry, who along with MCG holds the patent on the Butler product.

Protect contains oxalate, an industrial oxidant used to bleach clothing. Dr. Pashley and MCG hold the patent on the dental uses of the product. MCG has licensed Butler to market any dental products using the oxalate.

But it's been a long road from patent to professional product. And it may be an even longer road before Dr. Pashley's potion is found in over-the-counter consumer products, such as toothpaste.

Dr. Pashley obtained his first patent on the oxalate in 1977 and his second in 1985. Dr. Pashley and MCG received their first checks for royalties on the sales of Protect in October.

"When I got the patents, no one was really interested in the product," said Dr. Pashley, who is chairman of the MCG Patent and Copyright Committee. "Sometimes products are manufactured much faster if the corporate interest is greater."

The oxalate works when applied to a tooth by reacting with the calcium in the tooth's mass to form microscopic, white crystals. The crystals clog thousands of open tubules—fluid-filled columns that are believed to work as shock absorbers for dentin, the porous, pliable substance that comprises most of a tooth.

At the end of each tubule near the tooth's root is a nerve. Researchers believe those nerves are stimulated by movement of the fluid in the tubules.

If the tubules are disturbed, say by gum disease or vigorous brushing, the nerves can be stimulated, causing the pain associated with sensitive teeth.

Most people have some problems with sensitive teeth. Studies have shown that between one in five and one in seven adult patients have one or more sensitive teeth all the time.

Because the problem is common, Dr. Pashley's formula might be a successful addition to products such as toothpaste.

However, "according to FDA regulations, anything you put on or in a tooth is a device, but anything you brush on a tooth that might be swallowed is a drug," Dr. Pashley said.

Dr. Pashley helped the John O. Butler Co. file a request to investigate a new toothpaste containing oxalate in clinical trials, but the FDA first required toxicity studies. The studies, which were recently completed at MCG, have been filed with the FDA.

The matter remains on hold.

"The Butler Co. hopes within the next six months to do a clinical study on the efficacy of an oxalate-containing toothpaste at controlling dentin sensitivity. Then the company will apply for an NDA, a New Drug Application," Dr. Pashley said.

If approved, a toothpaste for people with sensitive teeth, also probably named Protect, will hit the shelves. ■

—Stephanie Neal

Computer Talk

A Medical College of Georgia associate professor has developed an important new tool for physicians' daily work in electromyography and for researchers in the field. And he has copyrighted it.

Dr. Michael Rivner, a neurologist and director of MCG's electromyography laboratory, has developed EMGBASE, a data base and report generator for electromyography labs. Electromyography, or EMG, is a type of clinical test using electricity to detect nerve problems and muscle disease. During tests, Dr. Rivner measures nerve conduction and muscle response. Different responses can suggest a variety of problems, from nerve injury to muscle disease.

Traditionally, physicians ran a number of tests, then all the information gathered and the test results had to be typed to go into patients' charts. Dr. Rivner's program allows physicians to either enter the information into the computer or to hook the testing equipment directly to the computer for automatic storage.

EMGBASE asks for the information needed in a logical order: patient information, a patient history, test results, physician comments, a summary, the diagnosis, an explanation of the diagnosis, other comments, and the diagnosis code, often used by hospitals. The computer also offers help whenever the operator asks for it.

"This program is much more flexible than traditional data bases," Dr. Rivner said. "Most of them won't let you type more than 256 characters in a field, and for electromyography the physician needs to have more space than that for histories, summaries and diagnoses. So I had to write a word processor in the data base program."

The program can find a patient's information by last name or part of a last name, Social Security number or hospital number. It can even identify all of a patient's records if he has changed names, according to Dr. Rivner.

"The physician can choose any or all of the nerve and muscle tests, enter the information, and the computer links it all together with the written sections and patient information and creates a patient report that can go in the hospital chart."

The program is designed to be easily updated by the user when new tests become available, and it can be personalized for each hospital.

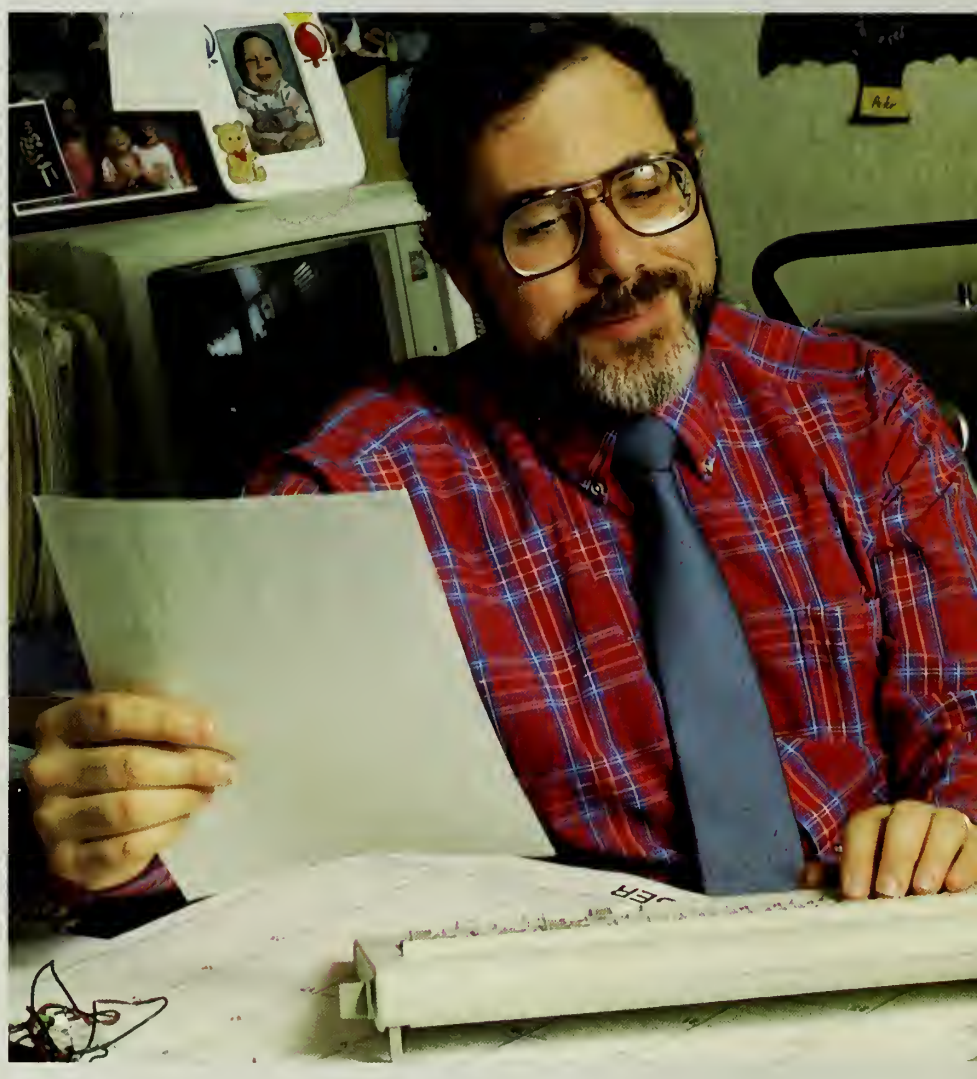
"That's important, because different hospitals commonly test with different equipment, or use slightly different tests," Dr. Rivner said. "This lets them adjust the program in a way that works best for them."

This is the first program of its kind for electromyography, according to Dr. Rivner.

"Before, there was absolutely nothing on the market like this," he said. "The reason that it didn't exist is because there is only a small market, and it needed to be written by someone who not only understands computer programming, but also knows electromyography. Secondly, for it to be useful, the data base information needs to be put in a report form, and there just wasn't a good way to do that."

To overcome these problems, Dr. Rivner had to approach the program from a different point of view than a typical data base. For instance, most data base computer languages have very limited text ability and have difficulty handling records of variable sizes, so he wrote the program in C language, a more flexible programming language.

"Since the program is written in C, it lets us enter larger fields than a data base



Dr. Michael Rivner

could, it runs faster, and it uses less space to store the information," he said.

"One of the big advantages of this program is that, in order to have a useful data base, the information has to be typed in. Because this involved an extra step, it just didn't get done. This way the information is typed in all at once to create the patient report, something that is always needed, and it goes into the data base at the same time."

Although the program already allows the user to update and personalize it, Dr. Rivner thinks he will be upgrading it in the future.

"I'd like to make a more intelligent program, make one that can generate the summary on its own, from the information the physician has entered, instead of him having to do it manually," he said. "Also, I'd really like the program to suggest tests that would be useful, based on symptoms, and for it to be able to suggest diagnoses."

These improvements would make this an "intelligent" program, called an expert system. However, he pointed out that this is still some time away and may have problems being accepted by the medical community.

"Expert systems are not very well accepted now. Some have been developed, especially in areas like infectious diseases. But many physicians are suspicious of a computer giving diagnoses. Also, most of these programs are very large, so doctors don't have access to them on the computer in the typical hospital.

"We're really introducing this program as a report generator that also can compile and keep a data base. A report generator will save physicians time, and it is better accepted."

The program is selling slowly, but Dr. Rivner feels demand for it will increase as more offices move toward computers.

"Right now, people don't want to change their habits, or they don't have a computer, or they don't want to spend money on a computer," he said. "But that's going to change. As more and more people get computers in their offices, they're more likely to buy software for it. Also, some EMG equipment is being designed so that it can be run by computer. As time goes by, this will make it more likely that offices will go to computer."

"Computers are doing more for us every day. Things we used to do by hand, like measurements, the equipment often does for us now, but that's really a computer program in the equipment."

The field of creating programs like this, called medical informatics, is still very new. However, as computers enter more phases of everyday life, it is becoming more common, and medicine will have to decide who will produce software like Dr. Rivner's.

"I think medicine needs to decide who is going to develop these types of software. Business, which is only interested in sales, or medicine, such as medical schools like here, who have researchers who are interested in how accurate it will be. I think medical schools will get more involved in this, and I think they need to be.

"I've been working on a program to do this since 1983.Since I'm an academic person and not in this to make a fortune, I've priced the program so that money isn't a problem for anyone that wants to use it (about $500). Business just couldn't do that. Not with the hours it would take a programmer to write it, and with the very specialized, small market it is designed for. But I can, because I am in academics. That will be important in the future." ■

—Ingrid Heggoy

Testing 1-2-3

When researchers and corporations collaborate, everyone typically comes out a winner.

A case in point: A company wants to market a new piece of medical equipment. But it must be assured of the product's safety and effectiveness. It offers grant money to researchers to thoroughly test the equipment. The result? The company is assured of a safe, marketable product; the researchers bolster their credentials and gain valuable experience; and the public is the recipient of new, improved technology.

Within the last year, the Department of Respiratory Therapy in the School of Allied Health Sciences participated in four such ventures: it researched four pieces of equipment. These tests were supervised by faculty, but students were also involved.

"We stress the importance of research, because we believe that this enthusiasm will be carried into students' careers," said Shelley Mishoe, chairwoman of the Department of Respiratory Therapy.

One of the tests involves a new type of oxygen insufflation catheter. The catheter is a tube placed into the lungs to suction fluid that has accumulated. Sometimes, during this procedure, a patient may suffer from hypoxemia, or a lack of oxygen. To prevent this, respiratory therapists have to give the patient oxygen before and during the procedure.

"The new catheter we are testing alternates between suctioning the fluid out of the lungs and flowing oxygen in," Ms.

Shelley Mishoe and Art Taft test catheter.

Mishoe said.

The device was developed by the VenTech Medical Manufacturing Corporation. The company then gave the respiratory therapy department a $24,000 grant to test it.

The study was completed by Ms. Mishoe and Art Taft, assistant professor and director of clinical education for the Department of Respiratory Therapy. A report on the study has been submitted for publication, but preliminary results show that the new catheter is a safe and efficient way to clear lungs while continuing to oxygenate a patient.

Another study recently completed for the Ciba-Corning Corporation was designed to test the Ciba-Corning oximeter against other oximeters currently on the market.

With a $25,000 grant, the Departments of Respiratory Therapy in the school and the hospital were asked to compare various oximeters, which measures the amount of oxygen attached to hemoglobin. This instrument is crucial in determining if enough oxygen is getting into a patient.

The study was conducted by Mr. Taft and David Lain, research and educational coordinator, Department of Respiratory Therapy in the MCG Hospital and clinical instructor in the Department of Respiratory Therapy.

A third grant from the Ohmeda Corporation for $12,000 was awarded to Dr. Lain to test the effectiveness of various ventilators set up in a variety of different ways.

These tests will be conducted on nonhuman subjects. It is hoped that the results will demonstrate which ventilator modes are most effective under a given set of circumstances.

Finally, Dr. Lain was awarded a $750 grant by Nellcor Inc. to compare permanent oximeter probes against disposable ones. The probe is the part of the oximeter that attaches the equipment to a patient.

The study compared the probes' effectiveness, accuracy, convenience and cost.

The Departments of Respiratory Therapy have recently started looking for grant money, and Ms. Mishoe is pleased with the response of corporations and the success in these joint efforts.

"We have become more experienced at picking a project, following it through and writing so that we could be awarded funding," Ms. Mishoe said.

She also credits the faculty with their ability to find their own projects and convince corporations that MCG is the best place to have equipment tested. As a result of this new activity in the department, all students are now required to participate in some form of research.

"Teaching is still our main goal," Ms. Mishoe said. "The research is just another tool that we can use to make our students better qualified to be respiratory therapists."

This year, Frank Dennison, instructor in the Department of Respiratory Therapy, was awarded the first School of Allied Health Sciences Research Award for his study on airway resistance which will be published in *Chest,* the official publication of the College of Chest Physicians.

The department plans to continue its research efforts. The ultimate goal is for each of the six faculty members to be involved in some type of research each year with at least one publication, according to Ms. Mishoe.

The corporations funding these projects are also happy to have MCG working for them. They have been very cooperative and have already approached the department proposing future collaborations, Ms. Mishoe said. ■

—David Waller

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60	4594	700	476	224
65	4856	730	472	258
70	5106	780	472	308
75	5404	850	479	371
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